



Hacking Decidim

```
~/projects/Decidim/decidim (0.19-stable)$ bundle exec rake development_app
  create
  create  README.md
  create  Rakefile
  create  .ruby-version
  create  config.ru
  create  .gitignore
  create  Gemfile
   run   git init from "."
S'ha inicialitzat un dipòsit buit del Git en /home/ivan/projects/Decidim/decidim/development_app/.git/
  create  package.json
  create  app
  create  app/assets/config/manifest.js
  create  app/assets/javascripts/application.js
  create  app/assets/javascripts/cable.js
  create  app/assets/stylesheets/application.css
  create  app/channels/application_cable/channel.rb
  create  app/channels/application_cable/connection.rb
  create  app/controllers/application_controller.rb
  create  app/helpers/application_helper.rb
  create  app/jobs/application_job.rb
  create  app/mailers/application_mailer.rb
  create  app/models/application_record.rb
  create  app/views/layouts/application.html.erb
  create  app/views/layouts/mailer.html.erb
  create  app/views/layouts/mailer.text.erb
```

Follo

PRO-TIP! You're not a hacker if you don't have your terminal in black

About me: Ivan Vergés

- Telecommunication Engineering (ETSETB/UPC)
- Working as a freelance developer and system maintainer since 2004
- PHP/Python/Ruby/Javascript
- 100% Linux & Free Software
- Lead developer in Platoniq from 2018 - 2022
- Co-Founder Pokecode since 2022
- I play the guitar



<https://twitter.com/ivanverges>



<https://meta.decidim.org/profiles/microstudi>



<https://github.com/microstudi>



ivan@pokecode.net

About PokeCode: Open source for democracy

- In love with the project and the community
- First official partners of decidim
- Driver of an international decidim ecosystem
- Ruby on Rails and Decidim trainers and promoters
- Quality, good treatment and have a good time



<https://twitter.com/pokecodenet>



<https://github.com/openpoke>



<https://meta.decidim.org/profiles/pokecode>



info@pokecode.net



Decidim experience

- The unofficial guide to install Decidim:

<https://platoniq.github.io/decidim-install/>

- Adapting Decidim for organizations
- Creator and maintainer of Decidim Awesome
- Custom modules (Direct Verifications, Reporting Proposals, Participatory PDF document)

<https://github.com/openpoke>

- Among the contributors to the Decidim Source Code
- Been in the Team of maintainers of the source code

<https://github.com/decidim/decidim/graphs/contributors>



Requeriments: <https://github.com/openpoke/decidim-hacks>

Docker up & Running with the test site ready
docker-compose up

A proper text editor

<https://code.visualstudio.com/>

Hacking Decidim

PokeCode

Cercar

Català

Registra't

Entra

Inici

Processos

Assemblees

Ajuda

How to customize Decidim, hacks and tricks!

GO TO LESSONS

Visual Studio Code - insiders

```
1 import { graphql } from "gatsby"
2 import React from "react"
3 import Image from "gatsby-image"
4
5 export default ({ data }) => {
6   const blogPost = data.cms.blogPost
7   return (
8     <div>
9       {blogPost}
10      <blogPost>
11        <blogPost>
12        <Image>
13      </div>
14    <h1>
15    <div>
16    <div>
17    </div>
18  )
19 }
20
```

EXTENSIONS: MARKETPLACE

- Python
- GitLens — Git sup...
- C/C++
- ESLint
- Debugger for Chr...
- Language Supp...
- vscode-icons
- Vetur
- Pine Wu
- C#

PROBLEMS

2: Task - develop

Info 1 | 'vdi...: Compiling...
DONE | Compiled successfully in 79ms

Info 1 | 'vdi...:
Info 1 | 'vdi...: Compiled successfully.

Ln 6, Col 21 | Spaces: 2 | UTF-8 | LF | JavaScript



Install reminder

<https://code.visualstudio.com/>

<https://github.com/openpoke/decidim-hacks/blob/master/docs/install-docker-on-windows-10-home.md>

<https://github.com/openpoke/decidim-hacks/blob/master/docs/install-docker-on-macos.md>

```
git clone https://github.com/openpoke/decidim-hacks.git
```

```
git pull
```

```
docker-compose up
```



Decidim-hacks is self-contained:

- <http://localhost:3000/processes>
- <http://localhost:8080/?folder=/home/workspace>

The screenshot shows the PokeCode website interface. At the top, there is a navigation bar with the PokeCode logo, a search bar, and links for 'English', 'Sign Up', and 'Sign In'. Below the navigation bar, there are tabs for 'Home', 'Processes', 'Assemblies', and 'Help'. The main content area is titled 'HIGHLIGHTED PROCESSES' and contains two process cards. The first card is 'Basic Hacking examples (level 1)' with a 'TAKE PART' button. The second card is 'Hacking technique examples (level 2)' with a 'TAKE PART' button. A red circle highlights the 'Hacking technique examples (level 2)' card, and a red arrow points from the text 'Find all the exercises here' to the 'TAKE PART' button of this card.

Find all the exercises here



Prepare environment

- A browser Tab with <http://localhost:3000/>
- A browser Tab with <https://github.com/openpoke/decidim-hacks>
- A browser Tab with <https://github.com/decidim/decidim>
- Visual Studio Code opened, open the folder where you downloaded Decidim-hacks or use the integrated editor:
- <http://localhost:8080/?folder=/home/workspace>



Goals: what are we going to learn

- Get to know Decidim internally:
 - Directory structure, modular structure
- How to personalize Decidim in the frontend:
 - Change html, css and javascript defaults by our own implementations
- How to interact with the database directly:
 - Access the rails console
- How to change some backend behaviours:
 - Monkeypatch classes (overwrite methods)



The screenshot shows the homepage of the IWillms, Ledner and Swift website. The header includes the company name, a search bar, and navigation links for 'Català' and 'Registra't · Entra'. The main navigation menu lists 'Inici', 'Processos', 'Assemblees', 'Iniciatives', 'Consultes', 'Jornades', and 'Ajuda'. The hero section features a large image of a cityscape with the headline 'Eaque minima quidem enim quae.' and a prominent orange 'PARTICIPA' button. Below this, there is a paragraph of placeholder text: 'Culpa eius nobis nihil dolores ut est vero magnam recusandae blanditis harum aspernatur sit exercitationem.' and a 'REGISTRAT' button. The page is divided into two main sections: 'PROCESSOS ACTIUS' and 'ASSEMBLEES ACTIVES'. Each section contains a grid of cards, each with a placeholder image and text. At the bottom of the 'PROCESSOS ACTIUS' section, there is a button labeled 'VEURE TOTS ELS PROCESSOS'.

This screenshot shows a detailed view of a process on the website. The header and navigation are consistent with the homepage. The main content area features a large image with the headline 'Optio ex non expedita laudantium.' and a sub-headline '#qui · Molestiae veniam.'. A red box highlights the text 'Est et.' with the dates '23-09-2019 - 23-12-2019' and a 'VEURE LES FASES' button. Below the main content, there are sections for 'DOCUMENTS RELACIONATS' (listing a PDF document) and 'IMATGES RELACIONADES' (listing an image). A 'TROBADES - PROPERES TROBADES VEURE TOTS (2)' section lists two events: 'ILLUM VELIT.' and 'QUI RATIONE.'. On the right side, there is a sidebar with a 'Seguir' button and a list of related items, including 'QUÈ ES DECIDEIX', 'QUI PARTICIPA', 'COM ES DECIDEIX', 'AMBIT sapiente', 'ÀREA D'ORGANITZACIÓ', 'GRUP PROMOTOR', and 'DATA D'INICI'. A 'Compartir' button is also visible at the bottom right.

How to turn this?



Into this...

Contribute to Our EU Consultation or ELSE! - comment on one of the discussion threads! ▶

inDICES Measuring the Impact of Digital Culture

Search

Ivan Vergés Edit

Home Processes Assemblies Calendars Help Blog

Welcome to InDICES Open Observatory!

PARTICIPATE

ACTIVE PROCESSES

Observatory Online Co-Creation Workshop
Active phase Partner Take Over

[inDICES Lab] Support, debates, and great ideas
Active phase Let's Begin!

SEE ALL PROCESSES

Voting is open 1-31.10.2019 - You can vote here ▶

Helsinki Home Areas Information

Search English Sign In

OmaStadi

Participatory budgeting makes your ideas and voice heard

OmaStadi – Helsinki's participatory budgeting

Youth Ruuti Budget

OmaStadi is Helsinki's way of doing participatory budgeting. Helsinki uses €4.4 million annually for realising ideas developed by the residents of the city. You can bring up ideas and vote on omastadi.hel.fi.

Through the Ruuti Budget, young people can annually come up with ideas and negotiate things that concern them. The Ruuti Budget offers an opportunity to affect the development of youth services, leisure activities and the entire City.

Vote!

Vote!

Vote and make a difference!

Between 1-31.10.2019, residents of Helsinki get to vote on OmaStadi plans made by the residents. The plans with the most votes will be realised.

Pokecode - Residencia Canòdrom - 16/02/2023



GOBIERNO DE LA CIUDAD DE MEXICO Plaza Pública

Español | Regístrate | Entra

El espacio donde nos encontramos para decidir.

Plaza Pública es la plataforma de participación de la Ciudad de México donde la ciudadanía puede proponer, debatir, votar y decidir proyectos y disposiciones que afectan su vida en la ciudad.

Consultas

Vota en los temas puestos a consulta por parte del gobierno

[Ir a consultas](#)

Asambleas

Próximamente podrás involucrarte en un grupo de decisión temático.

[Ir a asambleas](#)

Iniciativas

Pronto podrás crear propuestas y firmas para mejorar la ciudad

[Ir a iniciativas](#)

¿Qué hacemos con la feria?

Las personas que habitamos y disfrutamos la Ciudad de México podemos opinar sobre qué tipo de parque de diversiones queremos tener en el Bosque de Chapultepec.

Las ideas y propuestas sobre qué tipo de atractivos debería tener, qué debería conservarse, qué hacer con la icónica montaña rusa o para qué sector de la población debería estar pensado, servirán de guía para las bases del concurso de licitación internacional que se abrirá próximamente para decidir el futuro de ese preciado espacio de la Ciudad.

El espacio de Chapultepec donde está la feria, ¿debe seguir siendo un parque de diversiones?



Última actualización: 2019-10-21 10:35 hrs

Procesos terminados



Programa de Gobierno de la Ciudad de México 2019-2024



Diagnóstico Ciudadano ¿Cómo es la limpieza en el Centro Histórico?



Convocatoria para que personas damnificadas formen parte del Consejo Consultivo de la Comisión de Reconstrucción



Elección de la persona titular de la Comisión de Búsqueda

Encuesta abierta sobre la gestión del agua en el AMB | Haz clic aquí y participa

(CO)INCIDIM

Inicio | Procesos | Asambleas | Ayuda

Mapa de Energía

Garantizando el derecho a la información y participación

DESIGN Y PROGRAMACIÓN

VER LOS PASOS

INTRODUCCIÓN | AWESOME MAP | MAPA ENERGÍA

Proceso para garantizar el derecho a la información y participación en el ámbito del suministro energético

El mapa interactivo de energía recoge información de interés y problemáticas que se derivan de la pobreza energética y de su gestión.

Esta herramienta pretende garantizar el derecho a la información para que la ciudadanía conozca la realidad actual de la ciudad y pueda también introducir / denunciar nuevas problemáticas y causalistas, así como incluir soluciones u otros modelos energéticos sostenibles que empiezan a operar en el territorio.

FECHA DE INICIO
17 de enero de 2020

Referencia: HCD-PMAT-2020-02-2
Compartir
Incrusta

MAPA ENERGÍA VER TODO (87)

Punto Asesoramiento Energético de Ciudad Vella (Barcelona)

Manuel Fontalls

HORARIO - Del 1 de octubre, al 23 de diciembre y del 8 de enero al 31 de mayo. - Lunes,...

15/04/2020	● SIGUIENDO	● 0	● 0
------------	-------------	-----	-----

[VER PROPUESTA](#)

Punto Asesoramiento Energético Zona Nord (Barcelona)

Manuel Fontalls

HORARIO - Del 1 de octubre al 23 de diciembre y del 8 de enero al 31 de mayo. - Lunes, martes,...

17/04/2020	● SIGUIENDO	● 0	● 0
------------	-------------	-----	-----

[VER PROPUESTA](#)

Servicios Sociales Esplugues de Llobregat

Manuel Fontalls

HORARIO - General: Lunes a viernes de 8:30 h a 18:30 h. - Del 17 de junio al 13 de...

28/04/2020	● SIGUIENDO	● 0	● 0
------------	-------------	-----	-----

[VER PROPUESTA](#)

Servicio Asesoramiento Energético Tarragona

Manuel Fontalls

HORARIO: Lunes a viernes de 9:00 h a 14:00 h. SERVICIOS - Optimización de facturas. ...

21/04/2020	● SIGUIENDO	● 0	● 0
------------	-------------	-----	-----

[VER PROPUESTA](#)

[VER TODO \(87\)](#)


Normas y condiciones de uso | Accesibilidad | Política de privacidad | Descargar ficheros de datos abiertos



Kirjaudu sisään Rekisteröidy

TUUSULA
OSALLISTUMISALUSTA


[Etusivu](#) [Prosessit](#) [Tietoa](#)




Tervetuloa kehittämään Tuusulaa

[OSALLISTU](#)

Äktiiviset prosessit



Osallistuva budjetointi 2020
Aktiivinen vaihe [Ideaahaku](#)



Osallistuva budjetointi Tuusulassa 2019
Aktiivinen vaihe [Tulosten julkaisu](#)

[NÄYTÄ KAIKKI PROSESSIT](#)

Kuinka osallistun?

TAPAHTUMAT
Selvitä missä ja milloin voit osallistua julkisiin tapahtumiin.

KESKUSTELUT
Välitele, keskustele ja jaa näkemyksesi rikastuttaaksesi sinua koskettavia aiheita.


IDEAT
Tee ideoita, tue muiden tekemiä ideoita ja edistä muutoksia, joita haluat nähdä.

[LISÄTIETOJA](#)

Tervetuloa Tuusulan osallistumisalustalle!

Vantaa OSALLISUUSALUSTA Rekisteröidy Kirjaudu sisään

[Etusivu](#) [Osallistu](#) [Tietoa](#)




TERVETULOA KEHITTÄMÄÄN YHDESSÄ KORSON SUURALUETTA!

[OSALLISTU](#)

MEIDÄN KORSO -HANKKEESSA KEHITETÄÄN KORSON SUURALUEEN TURVALLISUUTTA JA YHTEISÖLLISYYTTÄ. TULE MUKAAN IDEOIMAAN, KESKUSTELEMAAN, ÄÄNESTÄMÄÄN JA TOTEUTTAMAAN!

[REKISTERÖIDY >](#)



TULOSEN JULKISTUSJUHLA

[OSALLISTU](#)

Mitä Korson suuralueella tehdään kevään 2019 aikana turvallisuuden ja yhteisöllisyyden parantamiseksi? Korsolaiset ovat päässeet vaikuttamaan helmikuun alkupuolella äänestämällä, mikä ideat Meidän Korso -hankkeessa saavat toteutusrahaa.

Juhlimme voittajajoukkoa yhdessä keskiviikkona 6.3. klo 17 alkaen Lumon Villiänkassa. Juhlissa kuulet voittajajoukoista ja niiden toteuttamisesta sekä haluessasi voit ilmoittautua mukaan jonkin idean toteuttamiseen.



Goals: what are we NOT going to learn

- To code/program:
 - Ruby, Css, Javascript or Html
- Ruby & Rails
- To install Decidim



What is Decidim

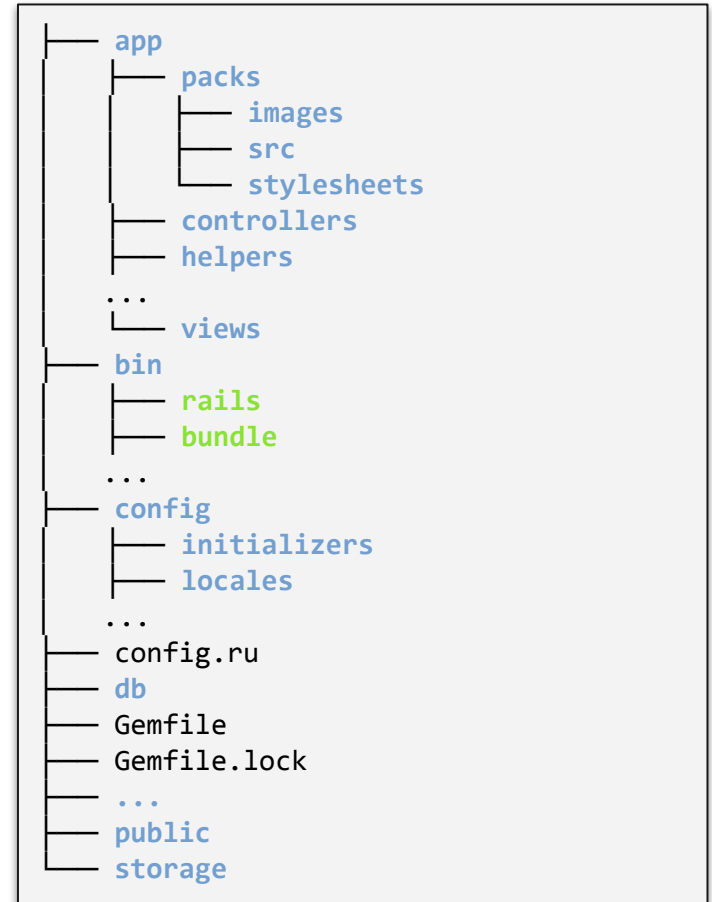
- It's a **Gem** for the **Ruby and Rails** framework
- It is a **Generator** (like `rails new`).
- **It generates our app.**

```
~ $ decidim my_application
  create
  create README.md
  create Rakefile
  create .ruby-version
  create config.ru
  create .gitignore
  create Gemfile
  run git init from "."
```



Decidim is Ruby & Rails

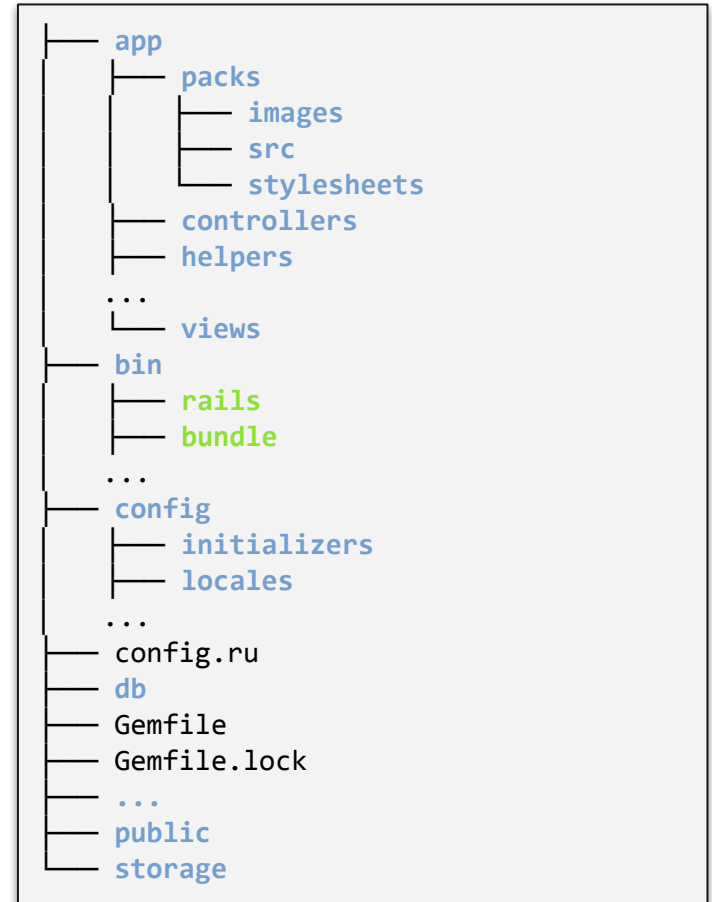
- **Gemfile** is the file used by **Bundler** to download all specified packages (gems) and its dependencies.
- **Gemfile.lock** contains all the gems installed with the exact version.
- **bundle**
 - installs Gems specified in the Gemfile
 - runs commands in the context of the Gemfile
- **rails**
 - Runs commands to manage Ruby & Rails:
 - bin/rails server
 - bin/rails console
 - bin/rails db:migrate





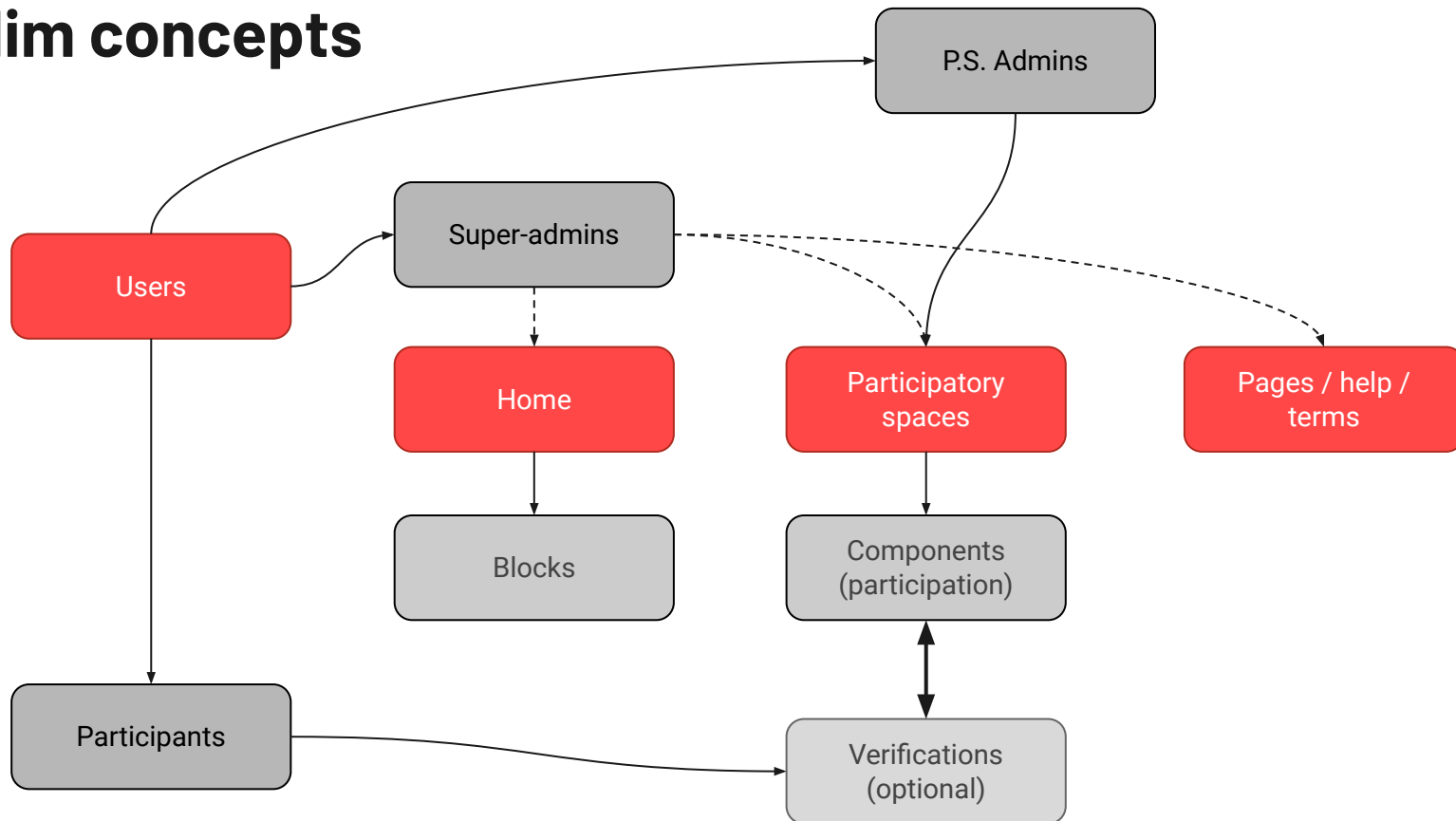
Decidim is Ruby & Rails

- **Rails** is (very) opinionated: it assumes there's one way to do most of the common things in the web.
- **"It's magic"**: it wants you to write the minimum amount of code. It's ok to not understand what's going on.
- It's for the Web and it's REST.
- Folder structure is immediately recognizable:
- In this workshop:
 - `app/packs/images`
 - `app/packs/src`
 - `app/packs/stylesheets`
 - `views`
 - `config/initializers`
 - `config/locales`





Decidim concepts





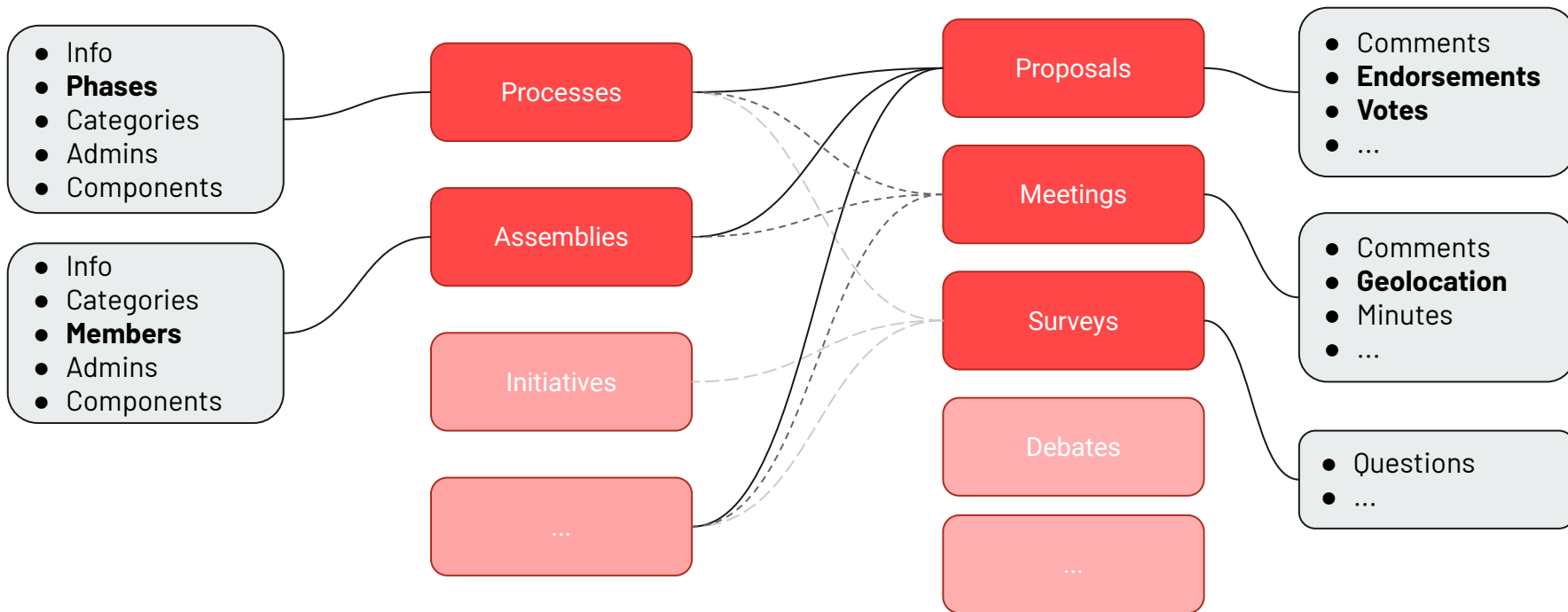
Operational design for participation

P. Features

👉 Participatory spaces

👉 Components

C. Features





Pressupostos participatius de Barcelona

#PressupostosParticipatiusBCN · Procés participatiu Pla d'Inversions Municipals de Districte



FASE 7 DE 7

Impuls i seguiment dels projectes

01-07-2021 - 31-12-2023

[Veure les fases](#)

[CONSULTA L'ESTAT D'EXECUCIÓ](#)

EL PROCÉS

SEGUIMENT

COMISSIONS DE SEGUIMENT

RESULTATS VOTACIÓ

MÉS INFORMACIÓ

Info

Component

Phases



CO-DESIGN PLATONIQ'S AND ICLEI&FRIENDS'S SESSIONS AT BERLIN'S CONSORTIUM ASSEMBLY !

- DASHBOARD
- PROCESSES [View public page](#)
- PROCESS GROUPS
- ASSEMBLIES
- CONFERENCES
- INITIATIVES
- CONSULTATIONS
- PAGES
- PARTICIPANTS

- Info
- Phases
- Components
- Digital community & participation 5
- Improving social media activities 9
- Social Survey for Labs
- Categories
- Attachments
 - Folders
 - Files
- Process admins
- Private participants
- Moderations

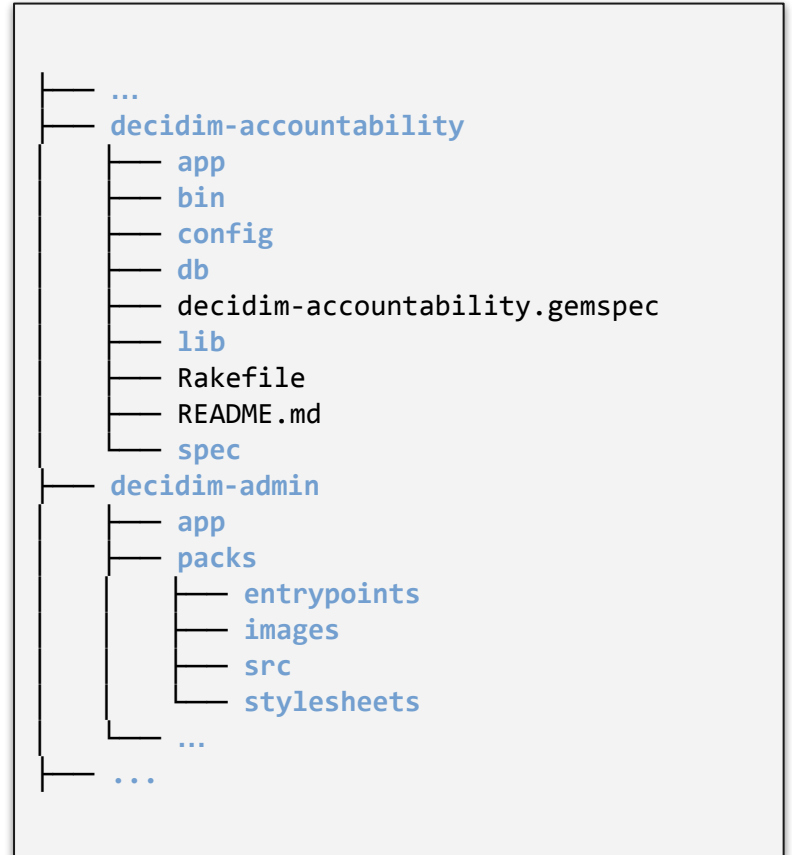
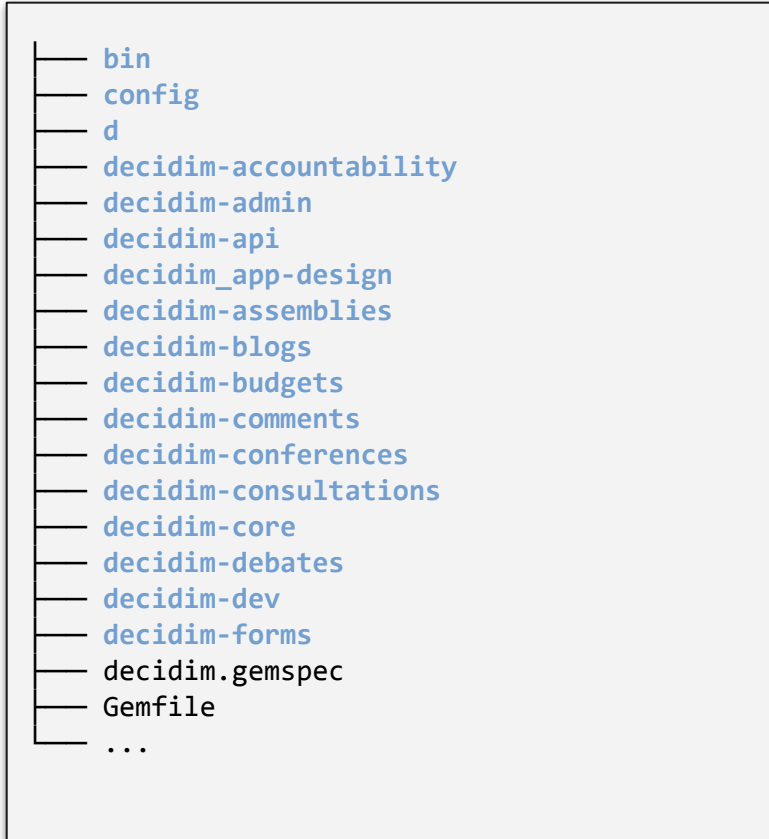
COMPONENTS			ADD COMPONENT ▾				
COMPONENT NAME	COMPONENT TYPE	ACTIONS					
Digital community & participation	Proposals						
Improving social media activities	Proposals						
Social Survey for Labs	Survey						

Process admin



Decidim modules

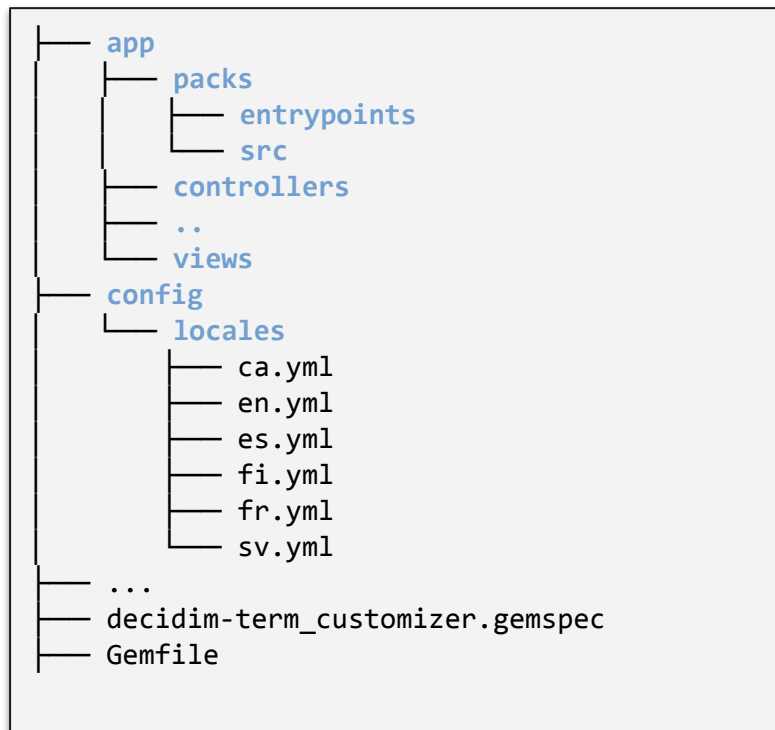
<https://github.com/decidim/decidim>



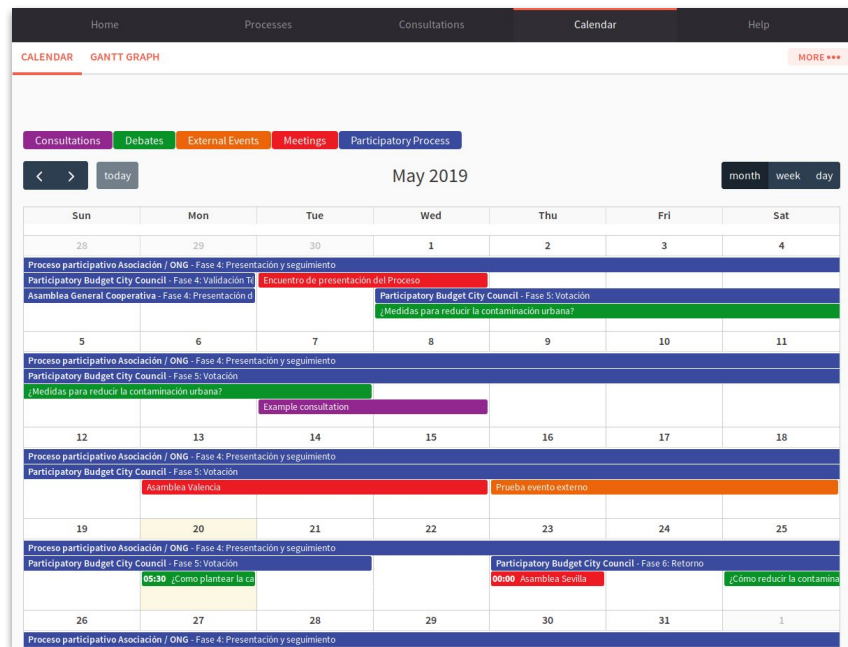


External modules

https://github.com/mainio/decidim-module-term_customizer



<https://github.com/alabs/decidim-module-calendar>





Technique 1: Overwrite Decidim HTML

- Views end in ***.erb**
- Rails looks for files in order when rendering a view (gems1 -> gem2- > ... -> our app)
- We just need to replicate the exact path to overwrite in our **app/views** folder.
- Paths counts starting after the **app/views** part of any gem

Is not always that simple:

- Some content is generated with custom classes (Cells, Presenters, Content renderers...)
- In this case we need more advanced techniques (monkey patching)



Example 1: Change something in the main layout

Step 1: Find the view to overwrite. It may be defined on any module!

TIP Use the inspector tools in your browser to locate something unique (more or less)

Hacking Decidim
div.logo-wrapper | 655.933 x 45 | Flex Container/Item

PokeCode

Cercar | Català | Registra't | Entra

Inici | Processos | Assemblees | Ajuda

How to personalize Decidim, hacks and tricks!

GO TO LESSONS

```
Search HTML
<body> flex
  <div class="pokecode-header"> flex
    <!--noindex-->
    <!--googleoff: all-->
    <div id="dc-dialog-wrapper" class="flex-center hide robots-noindex robots-nocontent noir data-nosnippet="" role="region"> flex
    <div class="flash callout primary small js-offline-message" style="display: none"> flex
    <!--googleon: all-->
    <!--noindex-->
    <div class="off-canvas-wrapper"> flex
      <div class="off-canvas-wrapper-inner" data-off-canvas-wrapper=""> flex
        <div id="offCanvas" class="off-canvas position-right hide-for-large is-transition-pu closed" data-position="right" data-off-canvas="lgupu-off-canvas" aria-hidden="true"> flex
        <div class="js-off-canvas-overlay is-overlay-fixed"> flex
        <div class="off-canvas-content" data-off-canvas-content=""> flex
          <div class="footer-separator"> flex
            <!--separates the footer from the rest of the page, creates a sticky footer-->
            <div class="header" role="banner"> flex
              <!--Topbar-->
              <div class="title-bar"> flex
                ::before
                <a class="skip" href="/?locale=ca#content">Vés al contingut principal</a>
              <div class="row column topbar"> flex
                ::before
                <div class="logo-wrapper"> flex
                  <a aria-label="Anar a la pàgina principal" href="http://localhost:3000/?locale=ca">
                     flex
                  ::before
                  <div class="logo-wrapper"> flex
                    <a aria-label="Anar a la pàgina principal" href="http://localhost:3000/?locale=ca">
```



TIP Search in <https://github.com/decidim/decidim> for the located identifier

The screenshot shows a GitHub search interface. The search bar contains 'logo-wrapper'. The left sidebar shows filters for Code (8), Commits (2), Issues (8), Discussions (0), and Packages (0). Under 'Languages', SCSS has 4 results, HTML+ERB has 2 results (circled in red), and Ruby has 2 results. The main content area shows 8 code results. The first result is a SCSS file: `decidim-core/app/packs/stylesheets/decidim/layouts/_logo.scss`. The second result is an HTML+ERB file: `decidim_app-design/app/views/public/partial/_topbar.html.erb`. The third result is another HTML+ERB file: `decidim-core/app/views/layouts/decidim/_wrapper.html.erb`, which is circled in red. The code snippets for the SCSS and HTML+ERB files are visible, showing the use of the `logo-wrapper` class and tag.

PRO-TIP! Download the source code of Decidim, Open Visual Studio Code and search for that identifier locally!



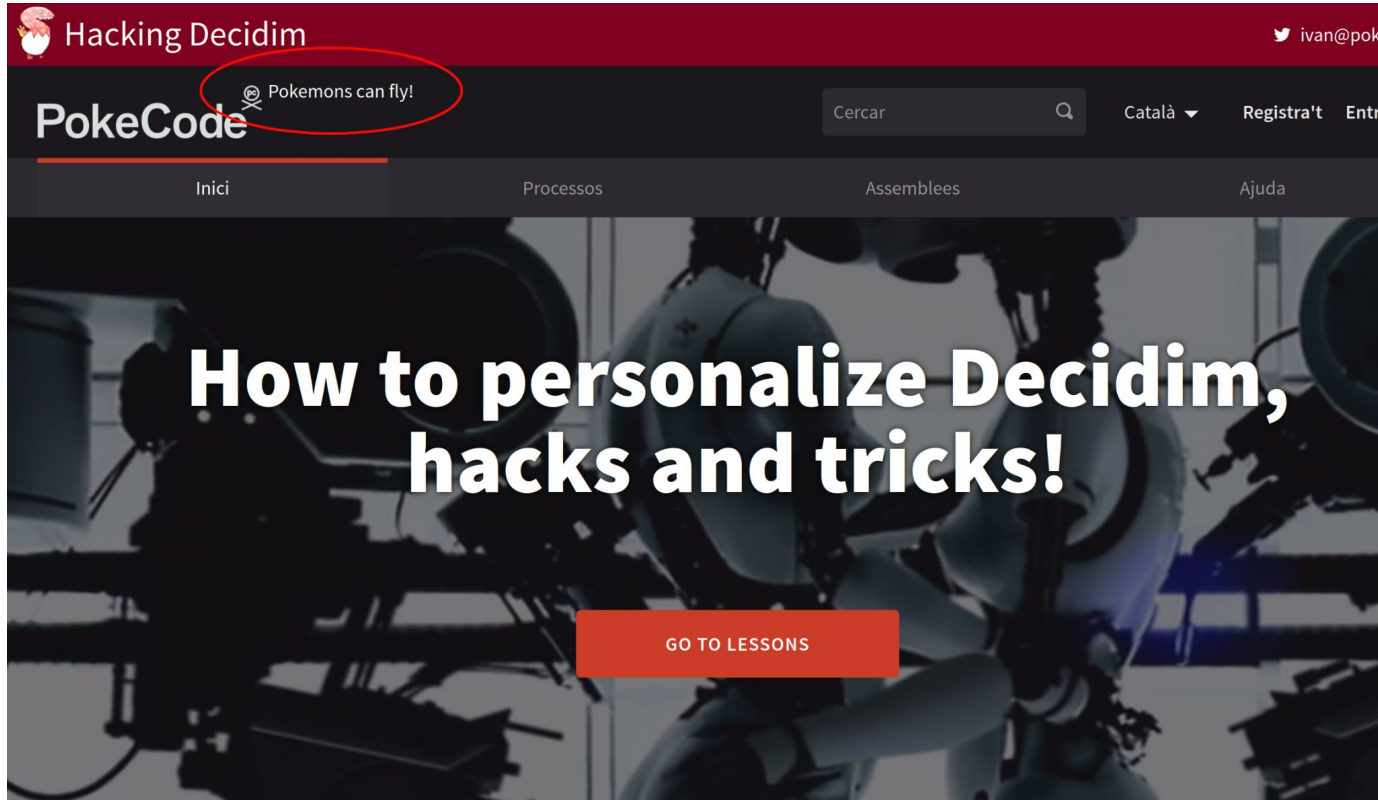
Step 2:

1. Copy the file `decidim-core/app/views/layouts/decidim/_wrapper.html.erb` in your editor.
2. Change what you need.
3. Save it in your own place replicating the folder structure (`app/views/layouts/decidim/_wrapper.html.erb`)

```
29 | | data-set= nav-search-modeler ></div>
30 | </div>
31 | <div class="off-canvas-content" data-off-canvas-content>
32 |   <div class="footer-separator">
33 |     <!-- separates the footer from the rest of the page,
34 |      | creates a sticky footer-->
35 |     <div class="header" role="banner">
36 |       <!-- Topbar -->
37 |       <div class="title-bar">
38 |         <%= link_to t("skip_button", scope: "decidim.accessibility"), url_for(anchor: "center
39 |         <% if current_organization.official_img_header.attached? %>
40 |           <%= link_to current_organization.official_url, class: "logo-cityhall" do %>
41 |             <%= image_tag current_organization.attached_uploader(:official_img_header).path,
42 |             <% end %>
43 |         <% end %>
44 |       <div class="row column topbar">
45 |         <div class="logo-wrapper">
46 |           <%= render partial: "layouts/decidim/logo", locals: { organization: current_organ
47 |           <div style="margin:5px">Pokemons can fly!</div>
48 |         </div>
49 |         <%= render partial: "layouts/decidim/topbar_search" %>
50 |         <%= render partial: "layouts/decidim/language_choser" %>
51 |         <div class="hide-for-medium topbar__menu">
52 |           <button type="button" data-toggle="offCanvas" aria-label="<%= t("layouts.decidim.
53 |           <%= icon "menu", aria_label: t("layouts.decidim.header.navigation"), role: "img
```



Step 3: Check in local!

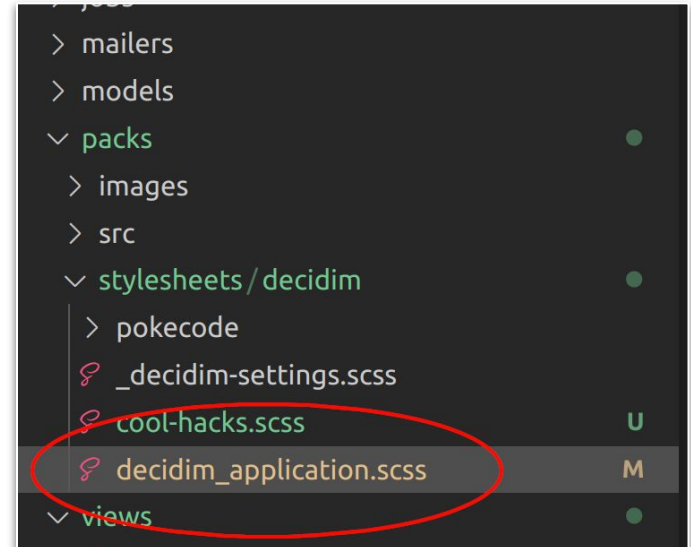


PRO-TIP! Now is a good time to: `git commit -a -m "add cool tweaks text"`



Technique 2: Overwrite Decidim CSS

- Most CSS is SASS formatted (*.scss)
- Usually, we can overwrite partials the same way as HTML, the base route is now : **app/packs/stylesheets**
- How CSS is loaded is defined in the main **decidim_application.css** file:





Example 2: Change some styles in the main layout

Step 1: Find the CSS-style to overwrite. It may be defined on any module!

TIP Use the inspector tools in your browser to locate and manipulate the css class(es) implicated

PokeCode

Pokemons can fly!

Cercar

Català

Registra't

Entra

Inici

Processos

Assemblees

Ajuda

How to personalize Decidim, hacks and tricks!

GO TO LESSONS

```
.title-bar :: {  
padding: 1rem 0.5rem;  
background: #800020;  
color: #fff;  
}
```

```
<!-- googleon: all-->  
<!--/noindex-->  
<!-- REDESIGN PENDING: Remove when redesign -->  
<div class="off-canvas-wrapper"> flex  
  <div class="off-canvas-wrapper-inner" data-  
    > <div id="offCanvas" class="off-canvas co  
      closed" data-position="right" data-off-  
        event)>  
    <div class="js-off-canvas-overlay is-ov  
    <div class="off-canvas-content" data-of  
      <div class="footer-separator">  
        <!-- separates the footer from the r  
        <div class="header" role="banner">  
          <topbar-->  
            <div class="title-bar">  
              <:before  
                <a class="skip href="#/local  
              <div class="row column topbar">  
                <:before  
                  <div class="logo-wrapper">  
                  <div class="show-for-medium d  
                  <div class="topbar_drople  
                  <div class="hide-for-medium to  
                  <div class="topbar__user show-  
                </div>  
              <:after  
            </div>
```

Rules

Layout

Computed

Changes

Cor

Filter Styles

Pseudo-ele

This Element

element :: {

```
.title-bar ::  
padding:  
background:  
color:
```

padding: 1rem 0.5rem;
background: #800020;
color: #fff;

Learn how to hack and manipulate the default Decidim UI/UX and more



Step 2: Copy the changed CSS into a new file in our custom autoloading folder

The image shows a VS Code interface with two windows. The top window displays the file explorer for a project named 'DECIDIM-HACKS'. The file tree is expanded to 'app > packs > stylesheets > decidim', where 'cool-hacks.scss' is selected and circled in red. The code editor shows the content of 'cool-hacks.scss':

```
1 .title-bar {
2   background: #800020;
3 }
```

The bottom window shows a file explorer for a project named 'pokecode'. The file tree is expanded to 'stylesheets/decidim', where 'cool-hacks.scss' and 'decidim_application.scss' are selected and circled in red. The code editor shows the content of 'decidim_application.scss' with the following lines circled in red:

```
9 @import "pokecode/hacks";
10
11 @import "cool-hacks";
12
```



Step 3: Check in local!

Hacking Decidim ivan@pokecode.net

PokeCode Català Registra't Entra

[Inici](#) [Processos](#) [Assemblees](#) [Ajuda](#)

How to customize Decidim, hacks and tricks!

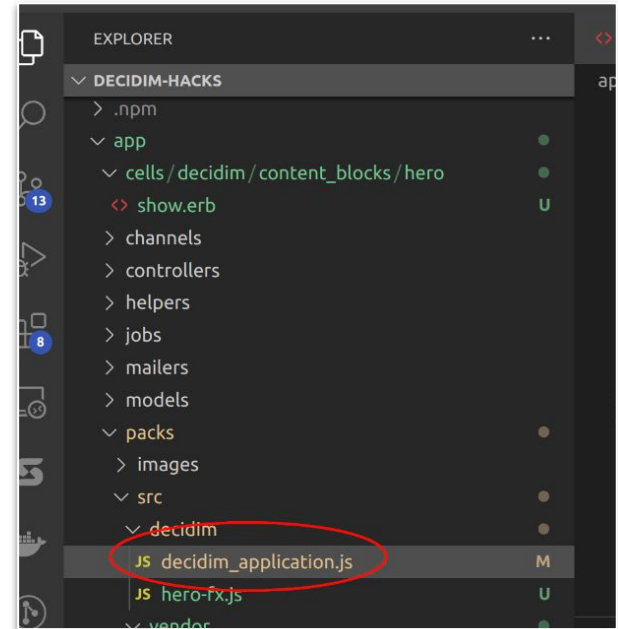
[GO TO LESSONS](#)

PRO-TIP! You're not a hacker if you don't `git commit -a -m "add a cool color background"`



Technique 3: Overwrite Decidim Javascript

- You can write in traditional Javascript or ES6 (*.js)
- Javascript works similar as CSS, main route is now: **app/packs/src**
- How Javascript is loaded is defined in the main **decidim_application.js** file:





Example 3: Add some Javascript

In this example we will apply also changes in CSS and HTML.

We will change the default behaviour of the main Hero's text image by:

1. Adding an external jQuery plugin
2. Overwriting the html view to show a custom text instead of the text from admin settings
3. Add a custom JS file

Super Customizable ¹Text Rotator with Style

PRO-TIP! Bad taste is a must for a hacker!



Step 1: Add the jQuery plugin to the system.

1. Download the jQuery plugin from:
<https://github.com/peachananr/simple-text-rotator>
 - a. JS file: `vendor/assets/javascripts/jquery.simple-text-rotator.js`
 - b. CSS file: `vendor/assets/stylesheets/simpletextrotator.css`
2. Edit `application.css` & `application.js` and tell them to require the downloaded files.

```
EXPLORER
ECIDIM-HACKS
  .npm
  app
  cells/decidim/content_blocks/hero
  show.erb
  channels
  controllers
  helpers
  jobs
  mailers
  models
  packs
  images
  src
  decidim
    JS decidim_application.js
    JS hero-fx.js
  vendor
```

```
app > packs > src > decidim > JS decidim_application.js
You, 46 seconds ago | 1 author (You)
1 // This file is compiled inside Decidim core pack.
2 // as part of that pack
3
4 // Load images
5 require.context("../images", true)
6
7 require("../vendor/run-prettify");
8
9 require("../vendor/jquery.simple-text-rotator");
10 require("../hero-fx");
11
```

```
cool-hacks.scss U 5 // To override CSS variables or Foundation s
decidim_application.scss M 6 //
7 // By default this is empty.
8 @import "pokecode/custom_header";
9 @import "pokecode/hacks";
10
11 @import "cool-hacks";
12 @import "../vendor/simpletextrotator";
13
```



Step 2: Find the view to overwrite.

TIP Use the inspector tools in your browser to locate a useful identifier (ie: **hero-heading**)

The screenshot shows a web browser displaying a Decidim page. The page has a dark background with a central image of a person in a red spacesuit. A large, light blue semi-transparent box contains the text "How to personalize Decidim, hacks and tricks!". Below this, there is a red button that says "GO TO LESSONS". At the bottom of the page, there is a white box with the text "Learn how to hack and manipulate the default Decidim UI/UX and more advanced tunings.".

The browser's developer tools are open on the right side, showing the HTML structure. The element `h1.text-highlight.heading1.hero-heading` is selected and highlighted in blue. The CSS styles for this element are shown below the HTML, including a font weight of 800 and a font size of 4.5rem.

```
<main id="content" data-content="">
  <section id="hero" class="extended hero home-section" style="image:url('/rails/active_storage/representations/_41fx8--f4afca78f11f73b67c8420a7f463dbeeb3e7944d/hal2.jpg');">
    <div class="hero_container">
      ::before
      <div class="columns small-centered large-10">
        <h1 class="text-highlight heading1 hero-heading"></h1>
        </div>
        ::after
      </div>
      <div class="row"></div>
    </div>
  </section>
  <section id="sub_hero" class="extended subhero home-section">
  <section id="highlighted_processes" class="wrapper-home home">
  <section id="highlighted_assemblies" class="wrapper-home home">
  <section id="how_to_participate" class="extended home-section">
  <section id="last_activity" class="wrapper-home upcoming-eva
```

```
Rules Layout Computed Changes Compatibility Fonts Animatio
Filter Styles
element :: {
}
.text-highlight.heading1 :: {
  font-weight: 800;
}
@media print, screen and (min-width: 64em)
.hero-heading :: {
  font-size: 4.5rem;
}
@media print, screen and (min-width: 50em)
.hero-heading :: {
  font-size: 3.5rem;
}
@media print, screen and (min-width: 40em)
.hero-heading :: {
  font-size: 2.5rem;
}
```



hero-heading seems reasonably unique

← → ↻ https://github.com/decidim/decidim/search?q=hero-heading

hero-heading / Pull requests Issues Codespaces Marketplace Explore

Code 10
Commits 2
Issues 3
Discussions 0
Packages 0

Languages
SCSS 2
HTML+ERB 8

Advanced search Cheat sheet

10 code results in [decidim/decidim](#) or view [all results on GitHub](#)

[decidim-core/app/cells/decidim/content_blocks/hero/show.erb](#)

```
4 <div class="columns small-centered large-10">
5 <h1 class="text-highlight heading1 hero-heading">
6 <% if translated_welcome_text.blank? %>
```

● HTML+ERB Showing the top match Last indexed on Sep 13, 2022

[decidim-elections/app/cells/decidim/votings/content_blocks/landing_page/header/show.erb](#)

```
3 <div class="row">
4 <div class="columns large-10 text-left">
5 <h1 class="text-highlight hero-heading mb-none">
```

● HTML+ERB Showing the top match Last indexed on Jul 8, 2022

[decidim_app-design/app/views/public/partials/_evote_hero.html.erb](#)

```
5 <div class="columns large-10 text-left">
6 <h1 class="text-highlight hero-heading mb-none">
7 Consultation Lorem Ipsum
```



Step 3: Overwrite the original view by creating a new one.

1. Replicate folder structure and copy the original file:
`decidim-core/app/cells/decidim/content_blocks/hero/show.erb`



2. In our folder: `app/cells/decidim/content_blocks/hero/show.erb`



Step 4: Edit the file. `app/cells/decidim/content_blocks/hero/show.erb`

We will remove any string coming from the database (sorry admins, no more Hero editing for you) and put a fixed phrase:

```
EXPLORER
└─ DECIDIM-HACKS
  └─ .npm
    └─ app
      └─ cells/decidim/content_blocks/hero
        └─ show.erb
          └─ channels
            └─ controllers
              └─ helpers
                └─ jobs
                  └─ mailers
                    └─ models
```

```
JS hero-fx.js U
decidim_application.scss M
show.erb U X
app > cells > decidim > content_blocks > hero > show.erb
1 <section id="hero" class="extended hero home-section" style="background-image:url('<%= background_
2 <div class="hero_container">
3 <div class="row">
4   <div class="columns small-centered large-10">
5     <h1 class="text-highlight heading1 hero-heading">
6       Decidim Hacks is a <span class="rotate">cool, sexy, awesome, massive</span><br>hackathon
7     </h1>
8   </div>
9 </div>
10 <div class="row">
11   <div class="columns small-centered small-6 medium-4 mediumlarge-3">
```

Decidim Hacks is a ``cool, sexy,
awesome, amazing, massive`
`hackaton!



Step 5: Create your own javascript that initializes everything, for instance:
app/packs/src/decidim/hero-fx.js

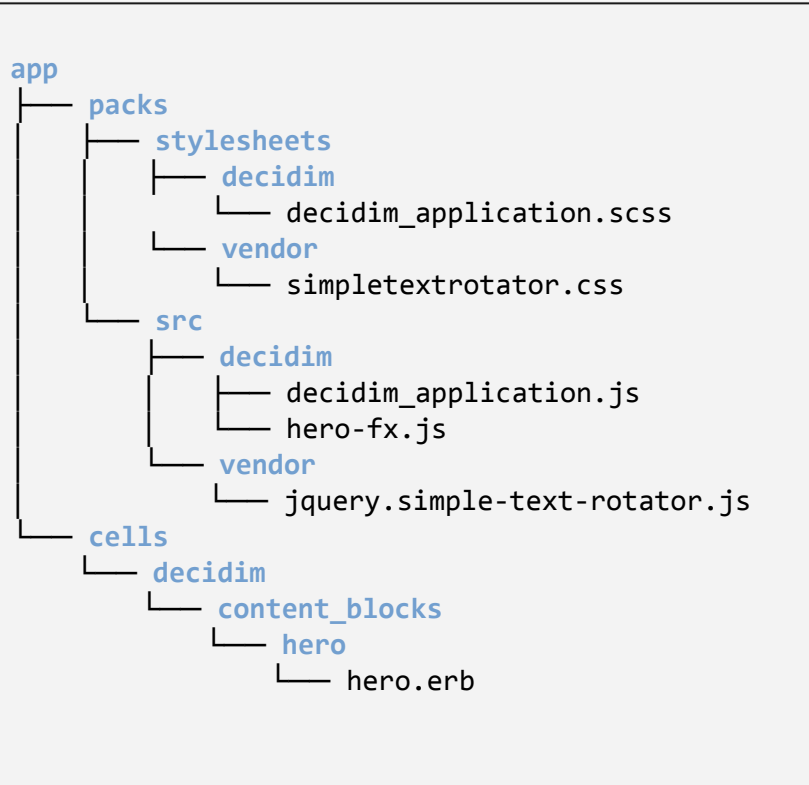
```
EXPLORER
└─ DECIDIM-HACKS
  └─ app
    └─ cells/decidim/content_blocks/hero
      └─ show.erb
    └─ channels
    └─ controllers
    └─ helpers
    └─ jobs
    └─ mailers
    └─ models
    └─ packs
      └─ images
      └─ src
        └─ decidim
          └─ JS decidim_application.js
          └─ JS hero-fx.js
          └─ vendor
            └─ JS jquery.simple-text-rotator.js
            └─ JS run_prettify.js
        └─ stylesheets
          └─ decidim
            └─ pokecode
            └─ _decidim-settings.scss
            └─ cool-hacks.scss
            └─ decidim_application.scss
            └─ vendor
              └─ # simpletextrotator.css
        └─ views
```

```
show.erb
JS hero-fx.js
app > packs > src > decidim > JS hero-fx.js > ($) callback > animation
1 $(function() {
2   $(".hero-heading .rotate").textrotator({
3     animation: "spin", // dissolve, fade, flip, flipUp, flipCube, flipCubeUp, spin.
4     separator: ", ",
5     speed: 1000
6   });
7 });
```




Recapitulation:

Files changed:

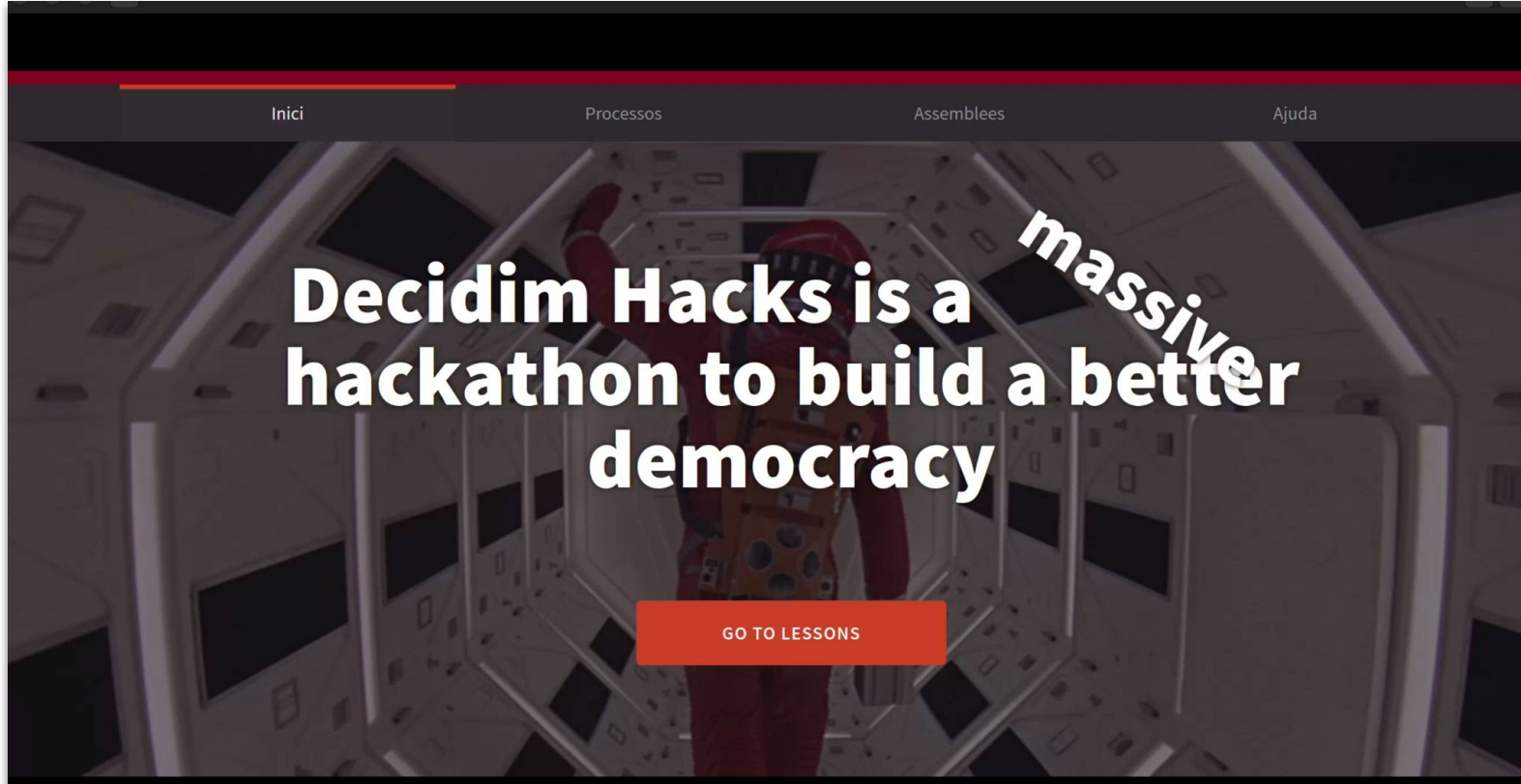


Steps:

1. Added external (vendor) javascript/css to the project
2. Configured Rails to load those files
3. Restarted Rails
4. Overwritten the Hero view.
5. Applied some custom javascript (activate the plugin)



Step 6: Enjoy!



PRO-TIP! Hackers like to `git commit -a -m "add the coolest fx ever"`



Technique 4: Overwrite locales

- Locales are the multi-language systems texts
- Written in YAML format.
- Inside **app/config/locales/*.yml** (every module/gem has its owns).
- To overwrite, just create the same key with different content (for each language active!)

Propostes

Code 32

Commits 1

Issues 10

Packages 0

Languages

HTML+ERB 23

YAML 9

[Advanced search](#) [Cheat sheet](#)

32 code results in **decidim/decidim**

[decidim-proposals/config/locales/ca.yml](#)

```
29   copy_proposals: Entenc que això importarà totes les propostes del
30   component seleccionat a l'actual i que aquesta acció no es pot desfer.
31   origin_component_id: Component des d'on importar les propostes
```

● YAML Showing the top two matches Last indexed on 25 Sep

[decidim-sortitions/config/locales/ca.yml](#)

```
5   additional_info: Informació del sorteig
6   decidim_category_id: Categories del conjunt de propostes en què vols
7   aplicar el sorteig
8   decidim_proposals_component_id: Propostes establertes
9   dice: Resultat de la tirada de daus. Tira un dau de sis cares o busca
10  alguna altra manera de generar un número de l'u al sis i introdueix-lo aquí
11  davant d'algunes testimonies. Això contribueix en la qualitat i garantia de
12  l'aleatorietat del resultat
```

● YAML Showing the top two matches Last indexed on 27 May



Example 4: Add custom locales

In this example we will create a new FX like the previous example to use multi-language texts.

We will:

1. Create the list of words that rotate as independent text entries in the app locales folder.
2. Create a “helper” ruby method that will list the words for us in the view.
3. Add a new javascript file to take care of this case.



Step 1: Edit the locales file: config/locales/en.yml

Add some content in the YAML format:

```
20 # the default I18n backend:
21 #
22 # true, false, on, off, yes, no
23 #
24 # Instead, surround them with single quotes.
25 #
26 # en:
27 #   'true': 'foo'
28 #
29 # To learn more, please read the Rails Internationalization g
30 # available at https://guides.rubyonrails.org/i18n.html.
31
32 en:
33   hello: "Hello world"
34   hacker_words:
35     word1: Cows can fly too!
36     word2: What about turtles?
37     word3: Jellyfish can fly!
38     word4: I can fly!
39
40
```



Step 2: Edit the layout file: `app/views/layouts/decidim/_wrapper.html.erb`

Change the previous “Cool tweaks” for the method we are going to use:

```
32 <div class="footer-separator">
33 <!-- separates the footer from the rest of the page,
34 | creates a sticky footer-->
35 <div class="header" role="banner">
36 <!-- Topbar -->
37 <div class="title-bar">
38 <%= link_to t("skip_button", scope: "decidim.accessibility"), url_for(anchor: nil, href: "#") %>
39 <% if current_organization.official_img_header.attached? %>
40 <%= link_to current_organization.official_url, class: "logo-cityhall" data-bbox="470 500 980 520 %>
41 <%= image_tag current_organization.official_img_header.attached_uploader(:official_img_header) %>
42 <% end %>
43 <% end %>
44 <div class="row column topbar">
45 <div class="logo-wrapper">
46 <%= render partial: "layouts/decidim/logo", locals: { organization: current_organization } %>
47 <div class="rotate" style="margin:5px"><%= fancy_words %></div>
48 </div>
49 <%= render partial: "layouts/decidim/topbar_search" %>
50 <%= render partial: "layouts/decidim/language_chooser" %>
51 <div class="hide-for-medium topbar__menu">
52 <button type="button" data-toggle="offCanvas" aria-label="=>
```



Step 3: Edit the helper's file: `app/helpers/application_helpers.rb`

Create the method `fancy_words`:

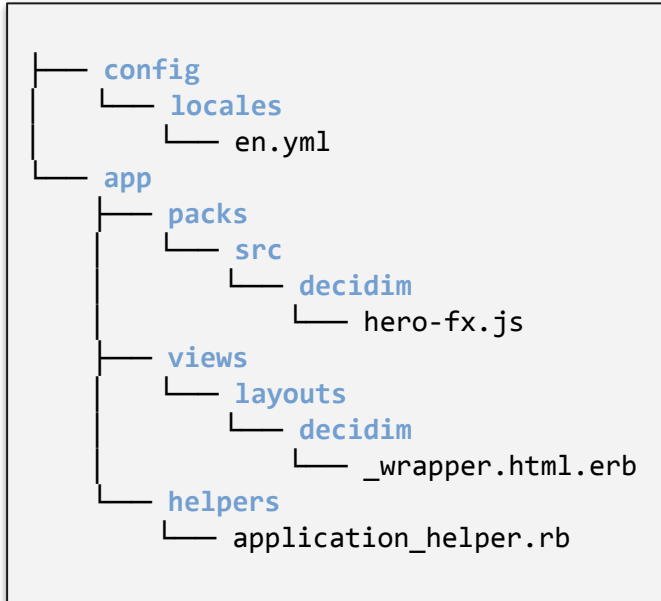
The screenshot shows the VS Code editor interface. On the left, the Explorer sidebar displays the project structure under 'DECIDIM-HACKS'. The 'helpers' folder is expanded, and the file 'application_helper.rb' is selected and circled in red. The main editor area shows the content of 'application_helper.rb' with the following code:

```
1 module ApplicationHelper
2   def fancy_words
3     words = (1..4).map do |number|
4       I18n.t("hacker_words.word#{number}")
5     end
6     words.join(",")
7   end
8 end
9
```



Step 4: Update the javascript associated file to initialize the plugin:
app/packs/src/decidim/hero-fx.js:

```
app > packs > src > decidim > JS hero-fx.js > ...
You, 1 minute ago | 1 author (You)
$(function() {
  You, 7 minutes ago • add the coolest fx ever ...
  1  $(".hero-heading .rotate").textrotator({
  2      animation: "spin", // dissolve, fade, flip, flipUp, flipCube, flipCubeUp, spin.
  3      separator: ",",
  4      speed: 1000
  5  });
  6
  7  $(".logo-wrapper .rotate").textrotator({
  8      animation: "dissolve", // dissolve, fade, flip, flipUp, flipCube, flipCubeUp, spin.
  9      separator: ",",
 10     speed: 2000
 11  });
 12 });
```


**Step 5:** Check and recapitulate

PRO-TIP! Hackers are humans too... `git commit -a -m "🤦 please no more effects..."`



Technique 5: Monkey Patching

Metaprogramming

- Ruby is an extremely manipulable programming language
- Almost everything can be redefined.
- We will use this capability to redefine methods defined in the Decidim core without having to touch it

Hooks

- Ruby (as a language) has hooks when certain events happen
- **class_eval** for creating instance methods
- **instance_eval** for creating class methods
- **include**, **extend** for overriding parts of classes





What is monkey patching?

From the Decidim gem, loaded first

```
1 Decidim
2   def say_hello
3     "hello"
4   end
5 end
```

In our app, loaded after Decidim

```
1 Decidim
2   def say_hello
3     "bye"
4   end
5 end
```



Where to monkey patch in Decidim

PROBLEM: Most of the classes are already instantiated when Rails load our app.

- We will use Ruby hooks to append our code in a custom Rails initializer, usually `class_eval` or `include`
- A Rails initializer is just a Ruby file inside `config/initializers/something.rb`. It's evaluated when the application starts (once only)
- Changing a initializer requires Rails reload



Example 5: Overwrite non-configurable settings

In this example we will monkey-patch the Proposals method that check the titles of the proposals

We will:

1. Identify the Proposal validation method
2. Create a new initializer and overwrite the method to allow more flexible titles in proposals

The screenshot shows a web form titled "CREATE YOUR PROPOSAL". On the left, a vertical progress bar indicates the current step is "Create your proposal", with other steps being "Compare", "Complete", and "Publish your proposal". The main form area contains a "Title" field with the value "i am short". A red border and error message "must start with a capital letter, is too short (under 15 characters)" are displayed below the field. The "Body" field contains the text "Hello, I want to hack!". Below the body field is a dropdown menu labeled "Create proposal as" with the selected value "Eve O'Hara". A red "Continue" button is at the bottom right.



Step 1: Find the class with the method.

This can be difficult and requires time to study the code to do it properly. But... we're feeling brave!

TIP: start to search for the locale key and then where is it placed in the code:

Title *
...

i am short

must start with a capital letter, is too short (under 15 characters)

must start with a capital Search

Code 1

Commits 0

Issues 1

Packages 0

Languages

YAML 1

1 code result in decidim/decidim or view [all results on GitHub](#)

[decidim-core/config/locales/en.yml](#)

```
787     title: Reply
788     show:
789       title: Conversation with %{usernames}
790     start:
791     send: Send
...
1224   long_words: contains words that are too long (over 35 characters)
1225   must_start_with_caps: must start with a capital letter
1226   nesting_too_deep: can't be inside of a subcategory
```



Search where the locale key is used

Search interface showing results for the query `must_start_with_caps`. The search bar contains the text `must_start_with_caps` and a **Search** button.

On the left sidebar, under **Code**, there is a count of **1**. Under **Commits**, **Issues**, and **Packages**, there are counts of **0**.

Under **Languages**, **YAML** has a count of **25**. **Ruby** is selected and highlighted with a blue bar and a red circle around it.

The main content area displays **1 code result in decidim/decidim**. The result is a link to `decidim-core/app/validators/etiquette_validator.rb`, which is circled in red. To the right of this link, the word **Bingo!** is written in a large, yellow, stylized font.

The code snippet shows the following lines:

```
39 record.errors.add(attribute, options[:message] || :must_start_with_caps)
40 end
41
42 def validate_length(record, attribute, value)
```

Below the code, it indicates **Ruby** (with a red dot icon), **Showing the top match**, and **Last indexed on 18 Jun**.



Step 2: Create a new initializer file. It will be used to monkey-patch the method found.

For instance:

config/initializers/bananas_for_proposals.rb

Also: open the original file to copy and analyze what we need.

```
# This validator takes care of ensuring the validated content is
# respectful, doesn't use caps, and overall is meaningful.
class EtiquetteValidator < ActiveSupport::Validator
```

```
  def validate_length(record, attribute, value)
    return if value.length > 15

    record.errors.add(attribute, options[:message] || :too_short)
  end
```

<https://github.com/decidim/decidim/blob/cc44574a14f7935dc6195de0c43486f69d824830/decidim>

```
  2
  3 # This validator takes care of ensuring the validated content is
  4 # respectful, doesn't use caps, and overall is meaningful.
  5 class EtiquetteValidator < ActiveSupport::Validator
  6   def validate_each(record, attribute, value)
  7     return if value.blank?
  8
  9     validate_caps(record, attribute, value)
 10     validate_marks(record, attribute, value)
 11     validate_long_words(record, attribute, value)
 12     validate_caps_first(record, attribute, value)
 13     validate_length(record, attribute, value)
 14   end
 15
 16   private
 17
 18   def validate_caps(record, attribute, value)
 19     return if value.scan(/[A-Z]/).length < value.length / 4
 20
 21     record.errors.add(attribute, options[:message] || :too_much_caps)
 22   end
 23
 24   def validate_marks(record, attribute, value)
 25     return if value.scan(/!?:;}{2,}/).empty?
 26
 27     record.errors.add(attribute, options[:message] || :too_many_marks)
 28   end
 29
 30   def validate_long_words(record, attribute, value)
 31     return if value.scan(/[A-Z]{35,}/).empty?
 32
 33     record.errors.add(attribute, options[:message] || :long_words)
 34   end
 35
 36   def validate_caps_first(record, attribute, value)
 37     return if value.scan(/^A[a-z]{1}/).empty?
 38
 39     record.errors.add(attribute, options[:message] || :must_start_with_caps)
 40   end
 41 end
```




Step 3: Edit the file and register our hook for the class we want to monkeypatch. Copy the method exactly as it is. Then modify what you want.

```
EXPLORER
OPEN EDITORS
UNTITLED (WORKSP...
> decidim
v decidim-hacks
  > app
  > bin
  v config
    > environments
    v initializers
      application_controller_rendere...
      assets.rb
      backtrace_silencers.rb
      bananas_for_proposals.rb U
      config.yml

bananas_for_proposals.rb x
decidim-hacks > config > initializers > bananas_for_proposals.rb
1  EtiquetteValidator.class_eval do
2    def validate_length(record, attribute, value)
3      return if value.length > 5
4
5      record.errors.add(attribute, options[:message] || :too_short)
6    end
7  end
```



Step 4: Reload the server. Everything modified inside initializers requires a server reload.

[← Back](#)

CREATE YOUR PROPOSAL

You are creating a proposal.

Create your proposal

Compare

Title *
...

must start with a capital letter

Body *
...

 **Behaviour modified!** 

[← Back](#)

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You are creating a proposal.

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Compare

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Title *
...

Body *
...



Inspire yourself: real examples

<https://omastadi.hel.fi/>

<https://plazapublica.cdmx.gob.mx/>

<https://dddc.decodeproject.eu/>

<https://labs.openheritage.eu/>



<https://github.com/City-of-Helsinki/decidim-helsinki>

<https://github.com/ponentesincausa/PlazaPublicaCDMX>

<https://github.com/DECODEproject/DDDC-instance>

<https://github.com/Platoniq/decidim-openheritage>

 <https://github.com/decidim/decidim/network/dependents>



Conclusions

1. Don't do it!
2. Be aware of upgrades!
3. Touch the minimum possible.
4. Test extensively in local before deploying in production



Leave your comments in

<https://github.com/openpoke/decidim-hacks/issues>

or just write me:

ivan@pokcode.net



<https://twitter.com/ivanverges>



<https://meta.decidim.org/profiles/microstudi>



<https://github.com/microstudi>



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