



Bremen University of Applied Sciences

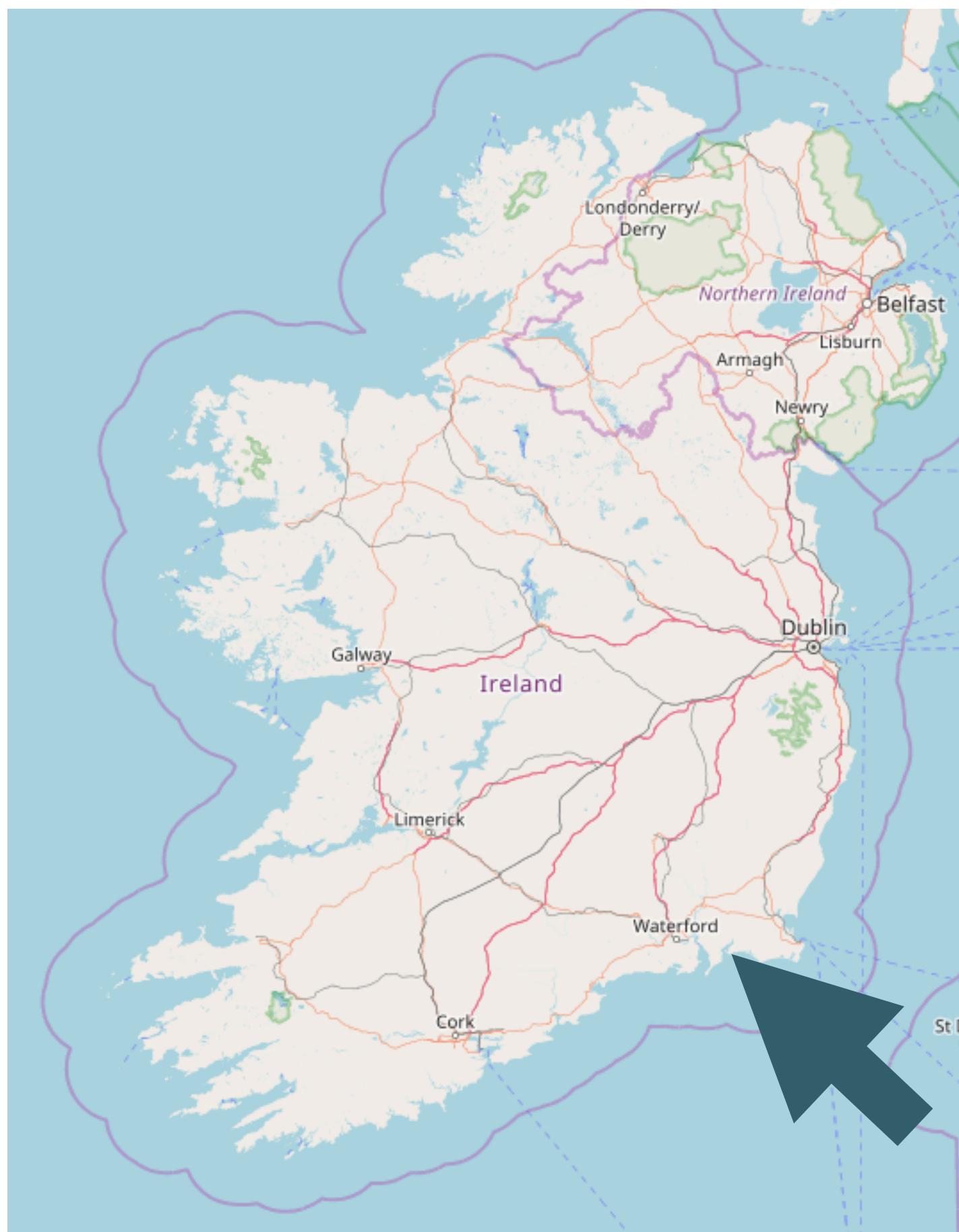
International Week 2024

<https://tutors.dev/course/tutors-workshop-2024>



Eamonn de Leastar
eamonn.deleastar@setu.ie

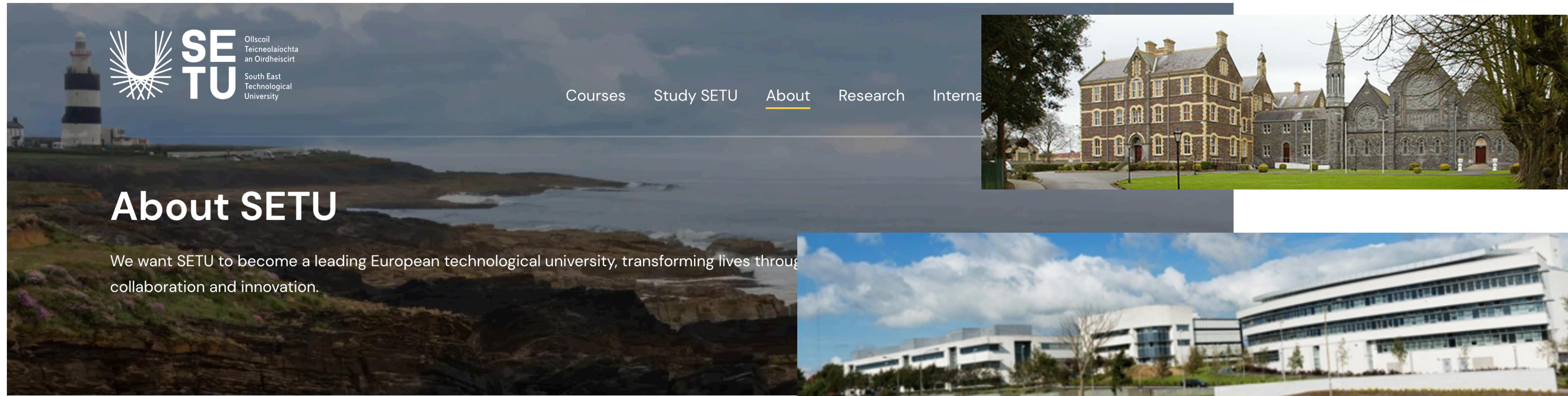




Waterford



Waterford (from Old Norse *Veðrafjørðr*, meaning "ram (wether) fjord", Irish: *Port Láirge*) is a city in Ireland. It is in the South-East Region, Ireland and is part of the province of Munster. The city is situated at the head of Waterford Harbour. It is the oldest^{[2][3]} and the fifth most populous city in the Republic of Ireland. It is the eighth most populous city on the island of Ireland.



About SETU

We want SETU to become a leading European technological university, transforming lives through collaboration and innovation.

The world is changing. And we are changing with it.

South East Technological University is the first technological university in south east Ireland. This gives us an exciting platform to establish our community as a centre for innovation, opportunity, and growth.

Through exceptional learning and collaboration, we aim to transform the ambitions of learners, researchers, and businesses across the south east and beyond.



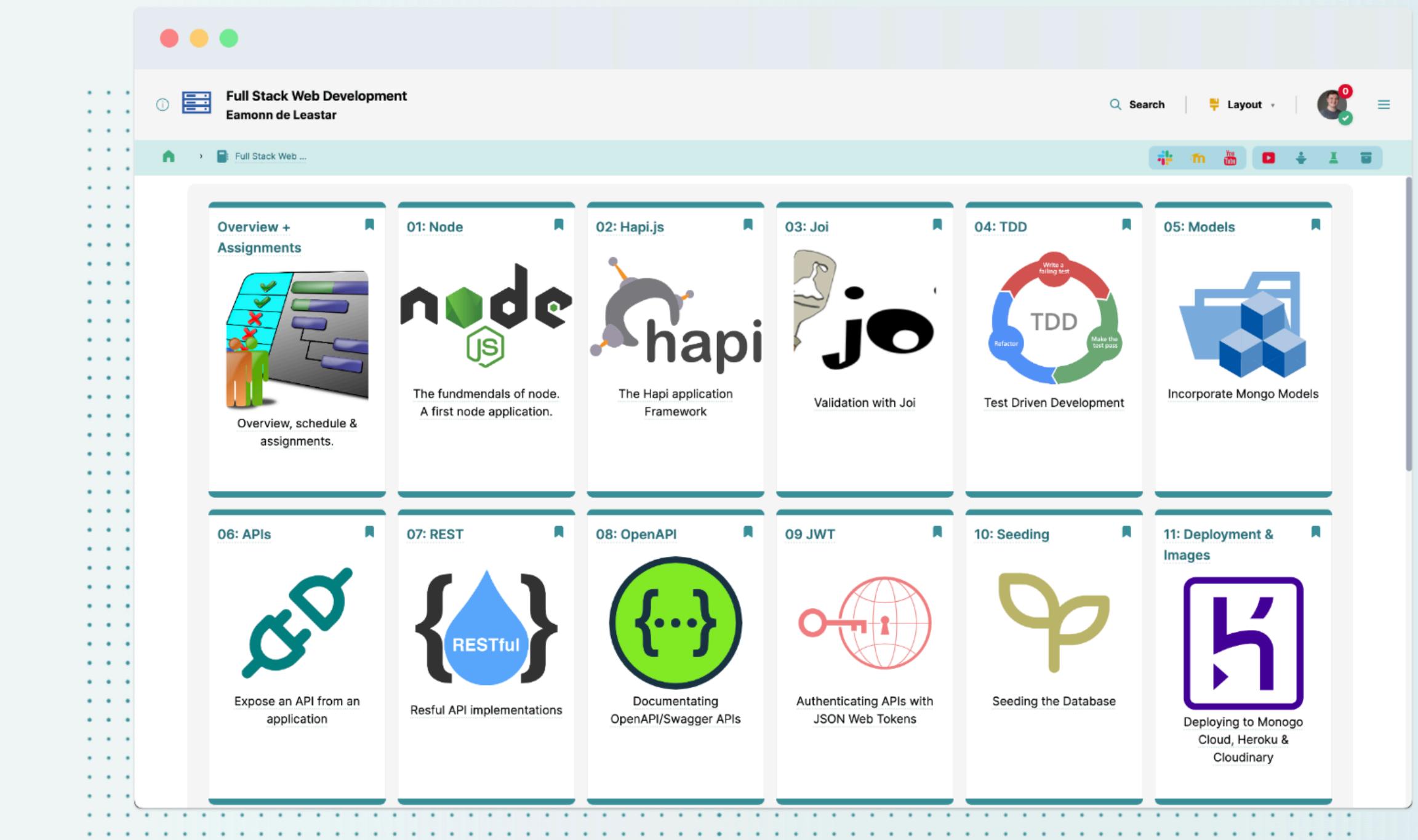
South East Technological University is a university-level institution in the South-East of Ireland with over 18,000 students and 1,700 staff.

SETU offers tuition and research programmes in various areas from Higher Certificate to Degree to PhD.



An Open Learning Web Toolkit

A collection of open source components & services supporting the creation of transformative learning experiences using open web standards.

[View Demo](#)[Documentation](#)[Catalogue](#)[Live](#)

The Values of the project

The Learner Experience



The **Learner Experience** prioritises web interactions that are **engaging, contextual, linkable, searchable, accessible** and **responsive**. In addition the experience should foster a sense of **community** and **connection** among fellow learners.

The Educator Experience



The **Educator Experience** prioritises the creation of a **guided paths** through a curriculum via the creation of learning materials that are **autonomous, structurally aligned, composable, auditable, extensible, versioned** and **independent**.

The Developer Experience



The **Developer Experience** prioritises the specification and implementation of **robust, well documented, loosely coupled components & services**, integrated into a **coherent toolkit** open to contributions from **diverse skill sets**.

Lab-17a Charts
Full Stack Web Development

Search Layout 0

Home Full Stack Web ... 17: Charts & Gr... Labs Lab-17a Charts

Google Sheets YouTube

Programming Fundamentals
Colm Dunphy, Peter Windle, WIT

Assignment Specifications
 This section details the assignments for module

00: Induction
 module structure · delivery approach · java programming language ·...

01: First Contact
 processing · java · drawing shapes · colour · grayscale · RGB · syntax errors ·...

02: Selection & Iteration
 loop body: increment or decrement; If condition is false Loop Update If condition is true Loop Body Process Results Tutorial4us.com

03: Methods
 method signature · return types · parameters · mouse event methods · bespoke...

04: Classes
 Class Object String methods · Objects · Classes · behaviour · attributes · Spot class ·...

05: Arrays
 Arrays int n[] = new int[4]; n [0] [1] [2] [3] n[0] n[1] n[2] n[3] n[1]=36; GUI · Swing · JOptionPane · dialog boxes · primitive arrays · array syntax ·...

06: Game of Pong
 Game of Pong · Ball class · Paddle class · Player class · Tournaments · Statistics ·...

Objectives
Components Libraries
Frappe Charts
Charts Page

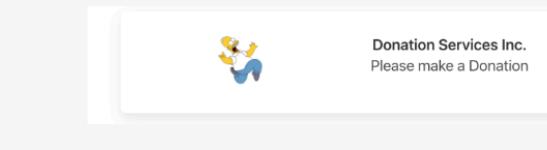
Charts Page

Introduce an additional icon in our navigator:

MainNavigation.svelte

```
...
<a href="/charts" class="c...
  <i class="fas fa-ch...
</a>
...

```



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routes/charts/+page.svelte

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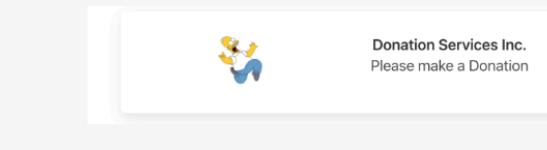
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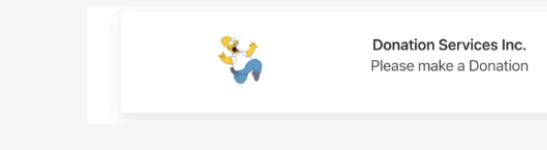
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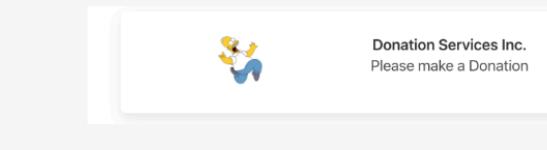
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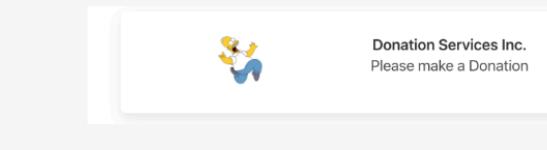
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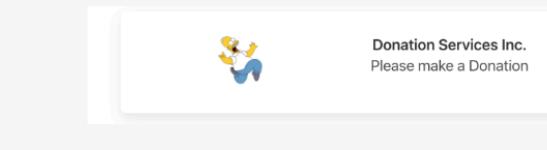
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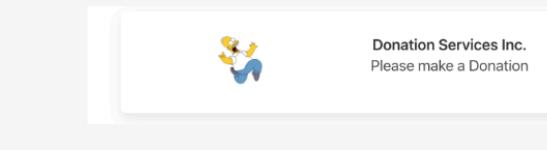
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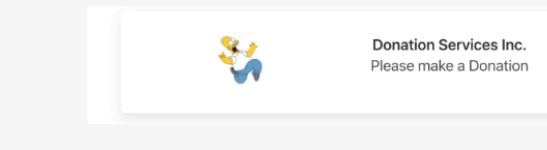
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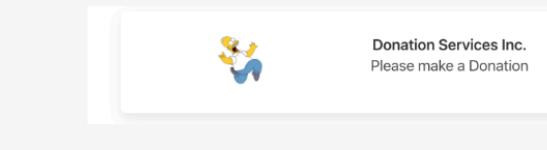
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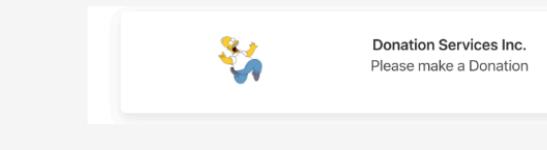
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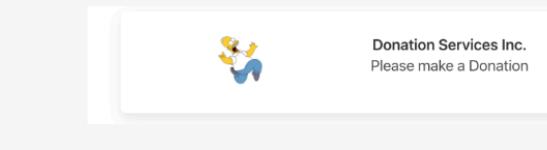
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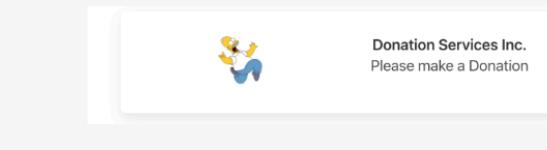
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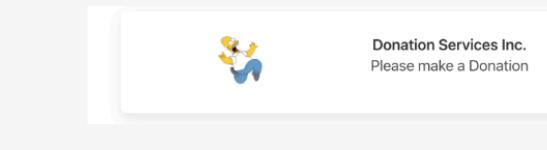
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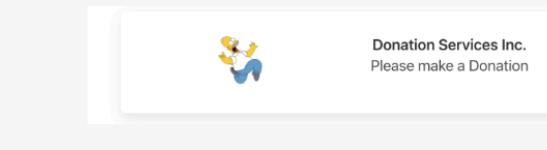
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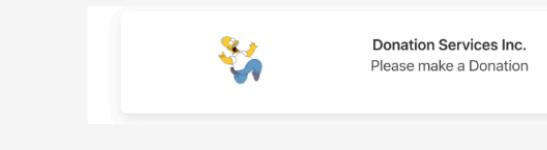
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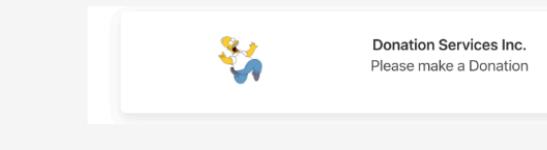
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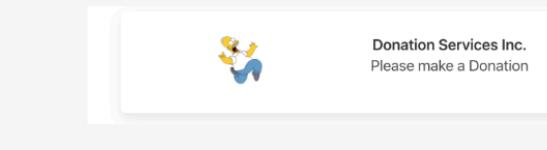
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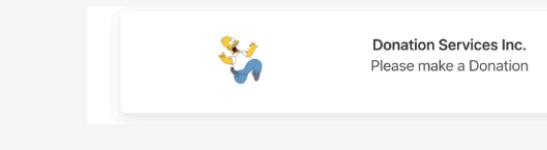
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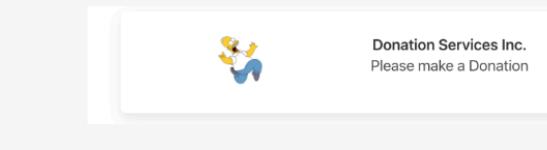
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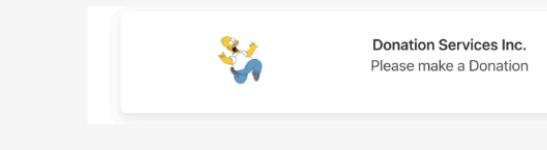
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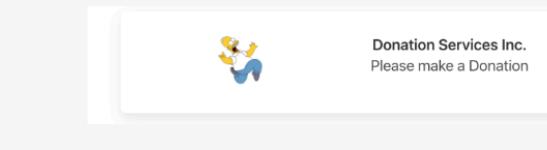
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Reference Course

A reference course containing all supported learning objects

Search

Layout

Reference Cour...

Edit this Page



Reference Course Example

Simple



Units with presentations,
labs + resources

Sidebar



Presentations, links + labs
in side bar

Videos



Video + Presentataions
and labs with videos

Panel Note



A Note can be a topic's
content

Panel Talk



A Talk can be a topic's
content

Reference



Example of all learning
resource types

Ordering



Explicit sorting of learning
objects

Iconify

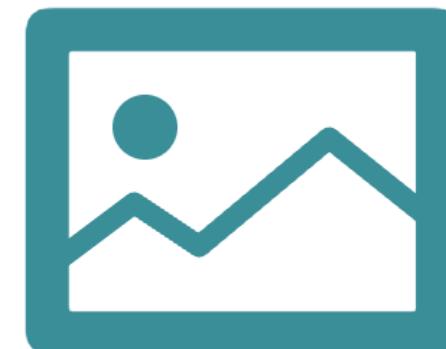


Using Iconify defined icons
instead of image files

<https://reader.tutors.dev/course/reference-course>

Creating & Publishing a Tutors Course

Learner Experience



An overview of the Tutors Learner Experience

Creating a Course



Creating a Tutors Course

Editing a Course



Editing and republishing a course

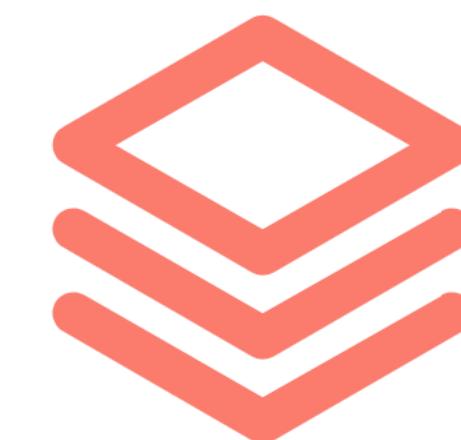
Tutors Reference Manual



Complete Reference Manual for Tutors

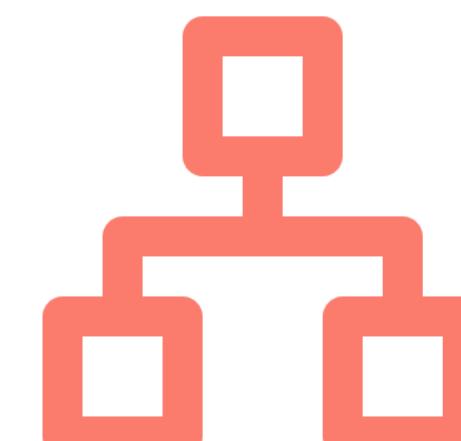
Tutors Labs

Create



Create and publish a Tutors course

Edit



Explore and edit the elements of a Tutors course

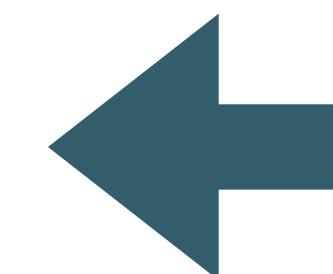
Overview of
Tutors UX

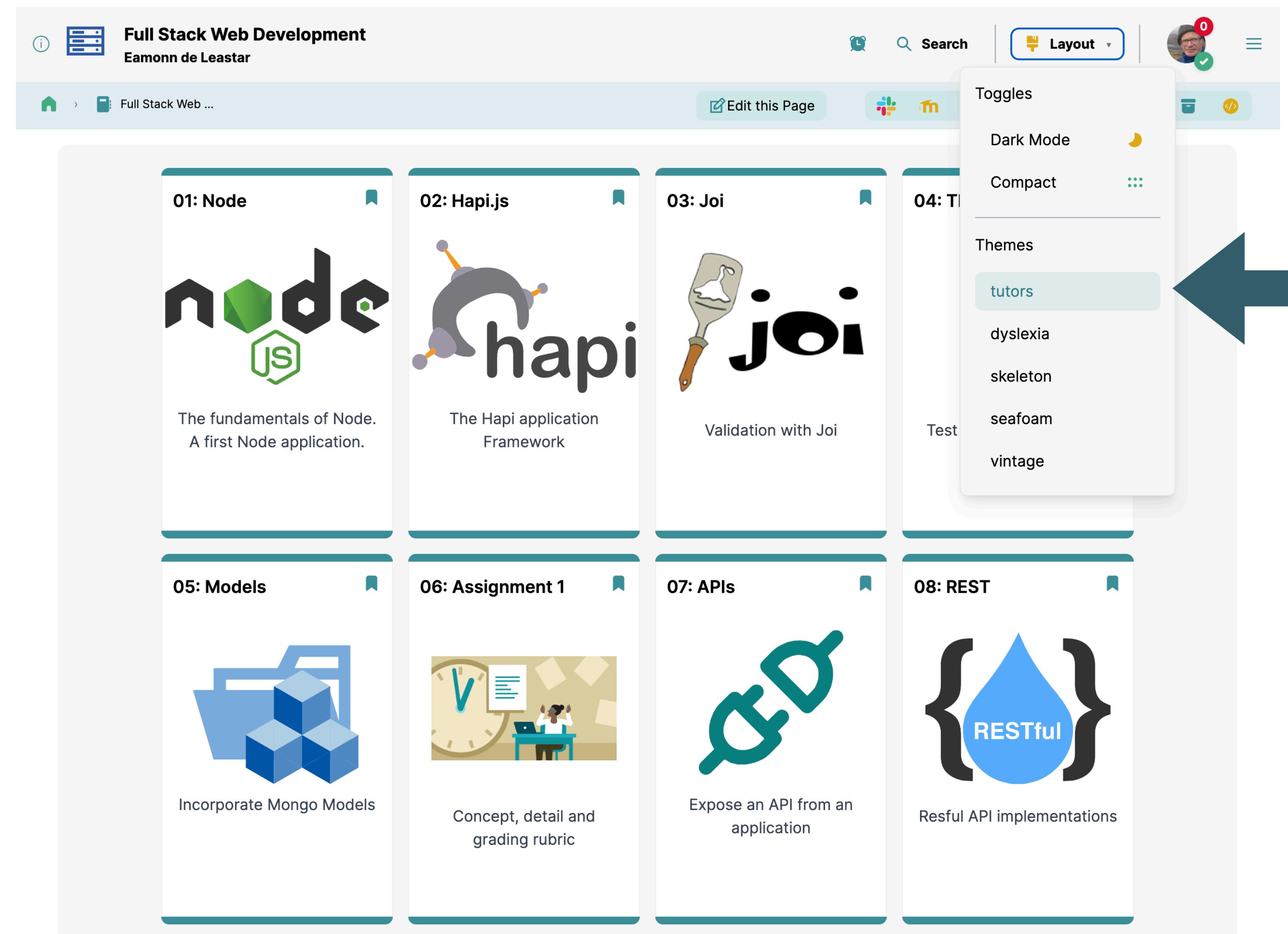
Overview of
Course
Creation

Course
Structure

Tutors User
Guide

Guides on
creating +
publishing
a course



A screenshot of a web-based learning platform. At the top, there's a header with the title "Full Stack Web Development" and the subtitle "Eamonn de Leistar". Below the header, a navigation bar includes a home icon, a search bar, and a "Layout" button. A user profile icon with a red notification badge is also present. A large, semi-transparent white overlay is centered over the content area. This overlay contains a "Toggles" section with "Dark Mode" and "Compact" options, and a "Themes" section listing "tutors" (which is highlighted in blue), "dyslexia", "skeleton", "seafoam", and "vintage". A large blue arrow points from the right side of the slide towards this overlay.

Theme Selector

Full Stack Web Development
Eamonn de Leistar

Layout

0

Edit this Page

01: Node

The fundamentals of Node. A first Node application.

02: Hapi.js

The Hapi application Framework

03: Joi

Validation with Joi

04: Test

05: Models

Incorporate Mongo Models

06: Assignment 1

Concept, detail and grading rubric

07: APIs

Expose an API from an application

08: REST

Resful API implementations

The screenshot shows a course dashboard titled "Full Stack Web Development" by Eamonn de Leastar. The dashboard features a grid of eight cards representing different lessons:

- 01: Node**: Node.js logo, "The fundamentals of Node. A first Node application."
- 02: Hapi.js**: Hapi.js logo, "The Hapi application Framework"
- 03: Joi**: Joi logo, "Validation with Joi"
- 04: Test**: Placeholder card for testing.
- 05: Models**: MongoDB models icon, "Incorporate Mongo Models"
- 06: Assignment 1**: Assignment icon, "Concept, detail and grading rubric"
- 07: APIs**: API endpoint icon, "Expose an API from an application"
- 08: REST**: RESTful API icon, "Resful API implementations"

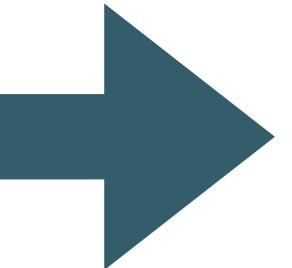
A sidebar on the right contains a "Layout" dropdown menu with the following options:

- Toggles**
 - Dark Mode
 - Compact
- Themes**
 - tutors
 - dyslexia
 - skeleton
 - seafoam
 - vintage** (highlighted)

A large blue arrow points from the text "Theme Selector" to the "vintage" theme option in the sidebar.

*Theme
Selector*

Design
System
used by
Tutors



The UI toolkit for Svelte and Tailwind.

Skeleton allows you to create adaptive and accessible interfaces for web apps of any shape or size.

[Get Started →](#) [Learn More](#)

Search

Friendly Adaptive Customizable

Skeleton @SkeletonUI

UI toolkit for Svelte and Tailwind.
50 Following 500 Followers

Design

A circular interface diagram with a central skull icon, surrounded by a search bar, a progress bar, and social media follower counts.

Theme Generator

Toggle the "Enable Preview" option to begin creating a new theme. The entire documentation site will update as you progress. You can navigate to different sections without losing your settings as long as you do not refresh the page. Disabling the preview will reset back to your original theme.

Enable Preview Randomize Colors

Primary Text & Fill Color: Black

Secondary Text & Fill Color: White

Tertiary Text & Fill Color: Black

Success Text & Fill Color: Black

Preview

primary secondary tertiary

success warning error

surface primary secondary tertiary

glass success warning error

Fonts

Base: mono Headings: mono

Text Color

Light Mode: Black Dark Mode: Primary 50

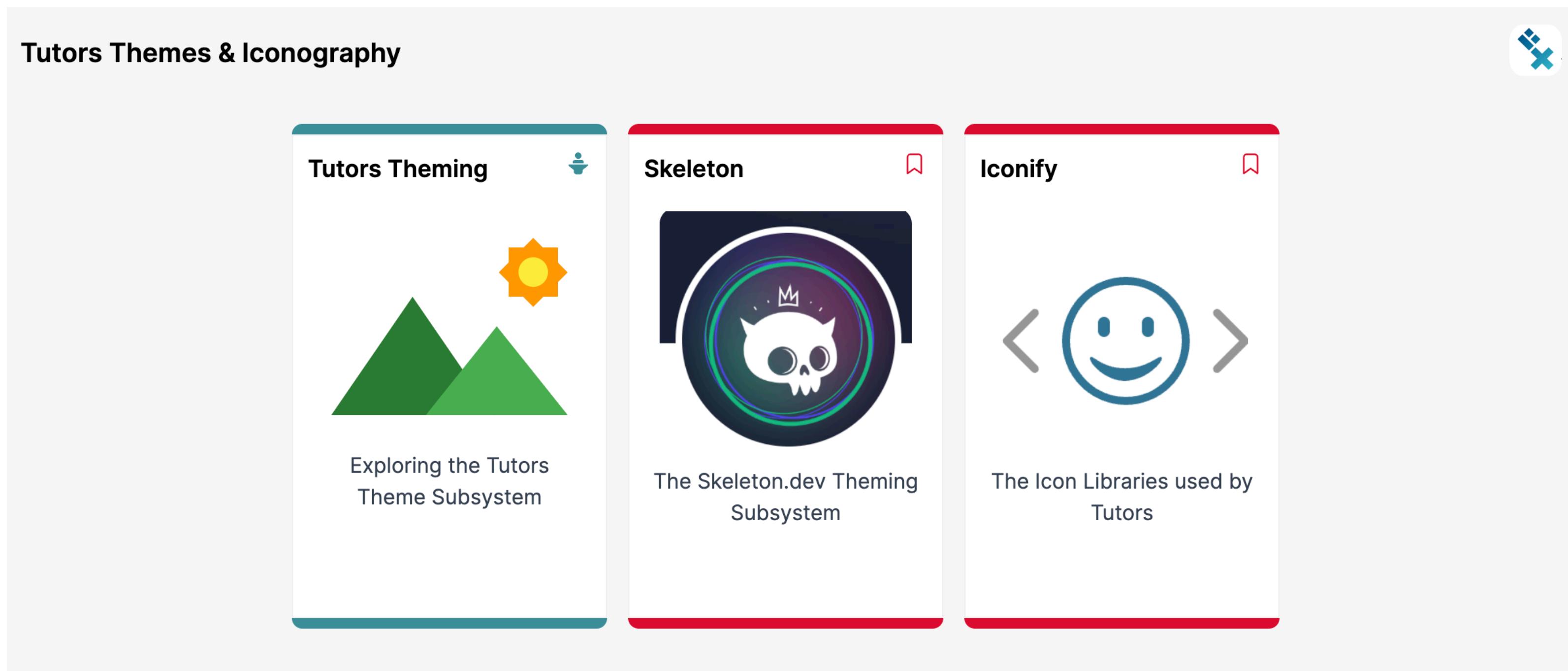
Border Radius

Base: 9999px Container: 8px

Border Size

Base: 1px

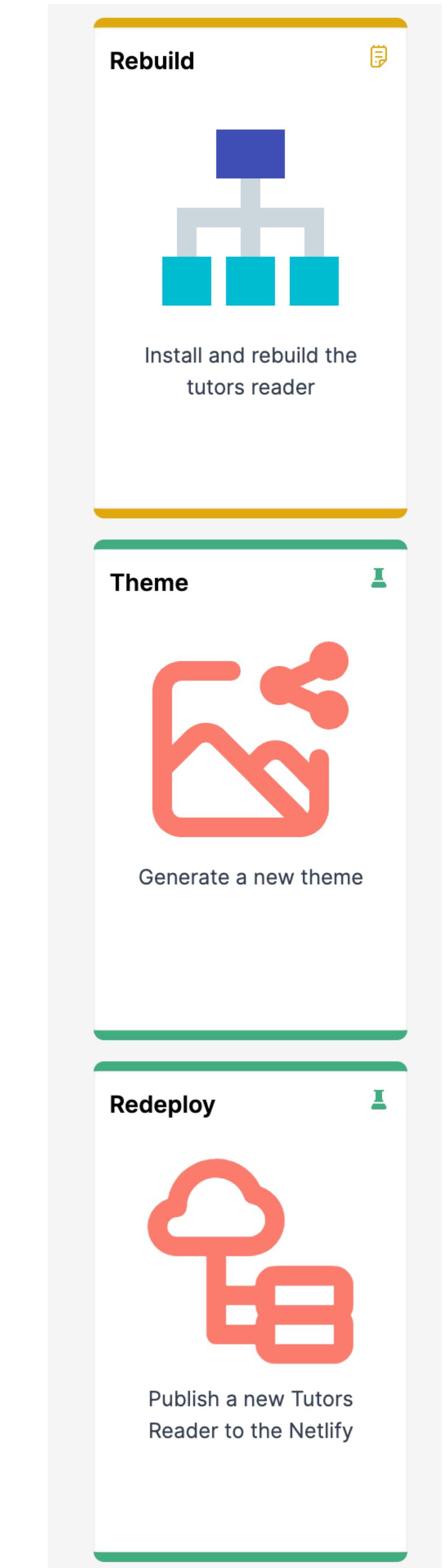
Theme designer



*Overview of
Tutors Themes*

*Skeleton
Design
Systems*

*Icon Library
used by Tutors*



*Guides on
Rebuilding,
Theming &
deploying
Tutors*

Unit Panel

This is a note with at TOC

This is the intro to the main page.

- Part 1
- Part 2
- Part 3
- Part 4

Unit 1 Title

Side Unit

Lab-01: Objectives

01: Text

02: Tables, Lines and Images

03: Links and Code Blocks

04: Images

05: Katex

Exercises: Exercises & Archives

Links and Code Blocks

You can insert links in bullet points:

- <http://github.com>
- <http://bitbucket.dom>

More Code Block examples

```
publish(path, course) {
  const basePath = '../' + path + '/' + this.folder;
  futils.initEmptyPath(basePath);

  this.resources = this.talks.concat(this.labs);
  futils.copyFileToFolder(this.img, basePath);
  futils.writeFile(basePath + '/index.html', nunjucks.render('index.html', {
    url: this.url.substring(5) + '/' + this.folder
  }));
  futils.writeFile(basePath + '/indexmoodle.html', nunjucks.render('indexmoodle.html', {
    url: this.url.substring(5) + '/' + this.folder
  }));
  console.log(this.title);
  this.publishTalks(basePath);
  this.publishLabs(basePath, course);
},
```

Note Example

Resource 1

Github Repo 1

Web Site

Varied

1 of 1

Tutors Starter Presentation.pdf

Replace with your own slide deck in a .pdf format!

Topic Structure

```
topic-01
└── unit-1
    ├── book-a
    └── talk-1
        ├── talk-1.jpg
        ├── talk-1.md
        └── talk-1.pdf
```

Panel Video

Lecture

Lab-01

Cards with SVG

Panel Talk

An example of a side unit

Learning objects with SVG images

Panel Video

Lecture

Lecture

Lab-01

A set of practical instructions or a walk-through

A short summary of the talk, no more than two sentences. Avoid bullet...

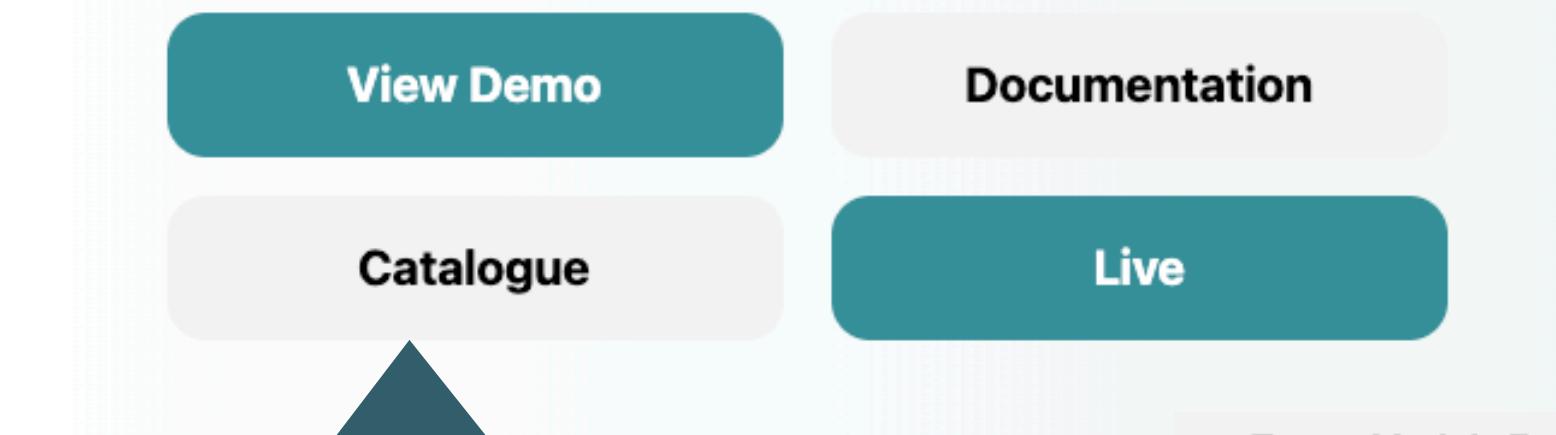
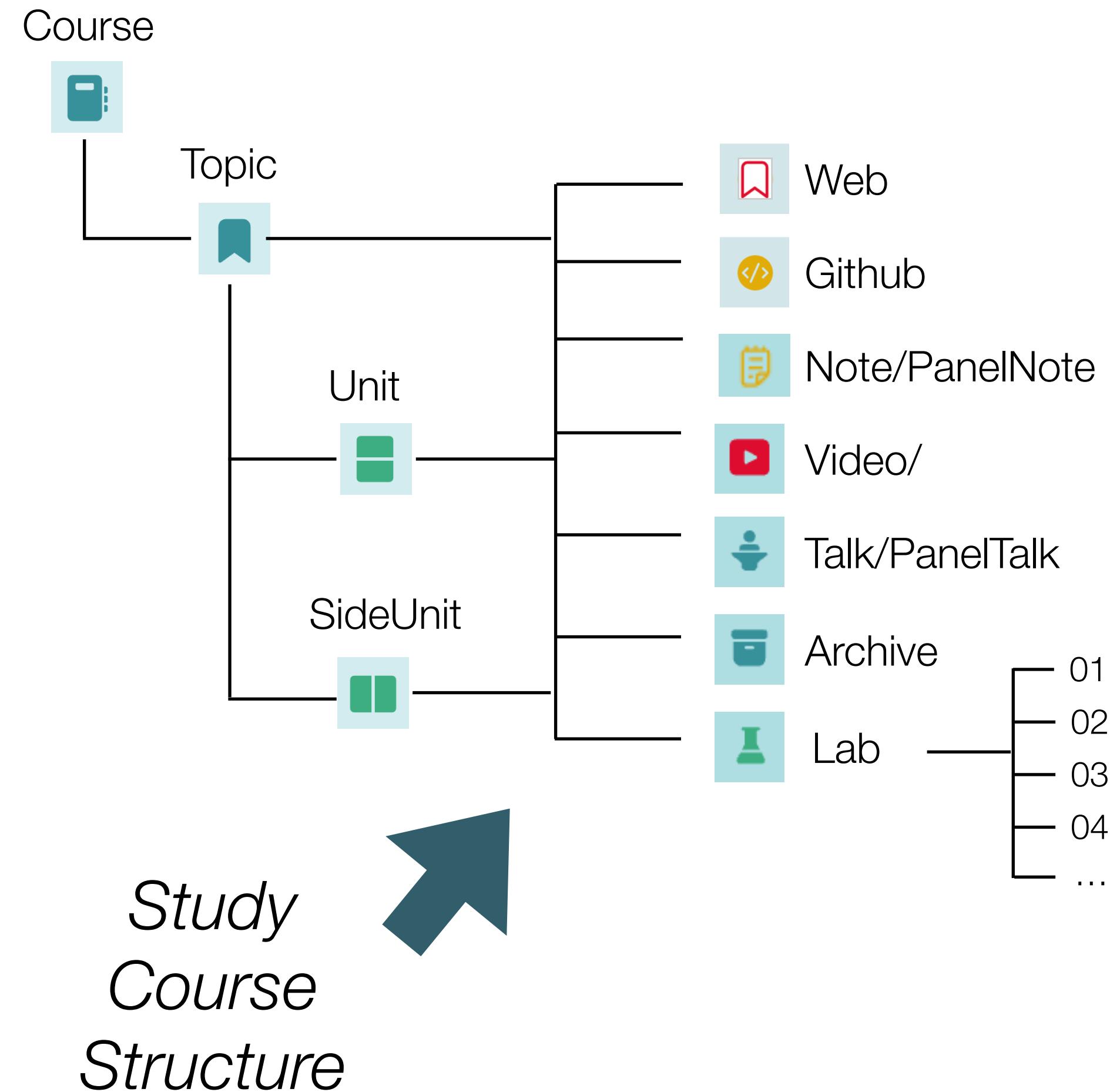
Provide a short summary, perhaps supported by a representative image.

A set of practical instructions or a walk-through

13

An Open Learning Web Toolkit

A collection of open source components & services supporting the creation of transformative learning experiences using open web standards.



*Explore
Catalogue*

The screenshot shows the Tutors Module Ecosystem dashboard with the following details:

- Title:** Tutors Module Ecosystem
- Subtext:** Full Stack Web Development
- Metrics:** 109 Active Modules, 790729 Page Loads
- Grid:** A 5x4 grid of course modules:
 - Agile Software Development (3 instances)
 - Business Intelligence and... (3 instances)
 - Business Intelligence...
 - Business Intelligence...
 - Business Intelligence
 - Business Intelligence - MB...
 - Computer Forensics
 - Computer Forensics
 - Computer Systems &...
 - Computer Systems &...
 - Course Title
 - Course Title
 - Database

Tutors Learning Experience

Tutors Module Catalogue

A large collection of Tutors Modules

Tutors Example Programme

A complete programme delivered on Tutors (any github account to access)

Figma

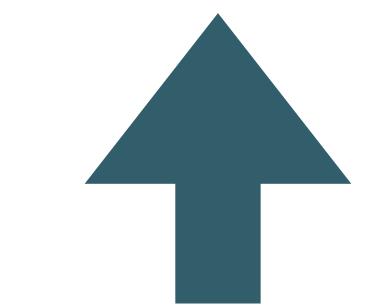
A design/prototyping tool

Penpot

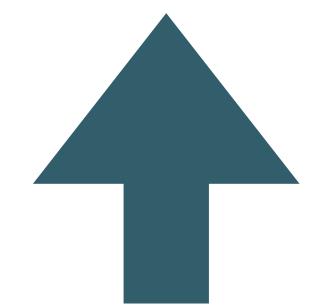
An Open Source Alternative to Figma



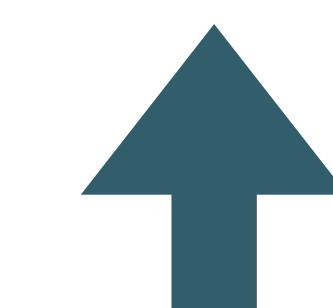
Tutors Module Catalogue



*Complete
Multi-Course
Programme*

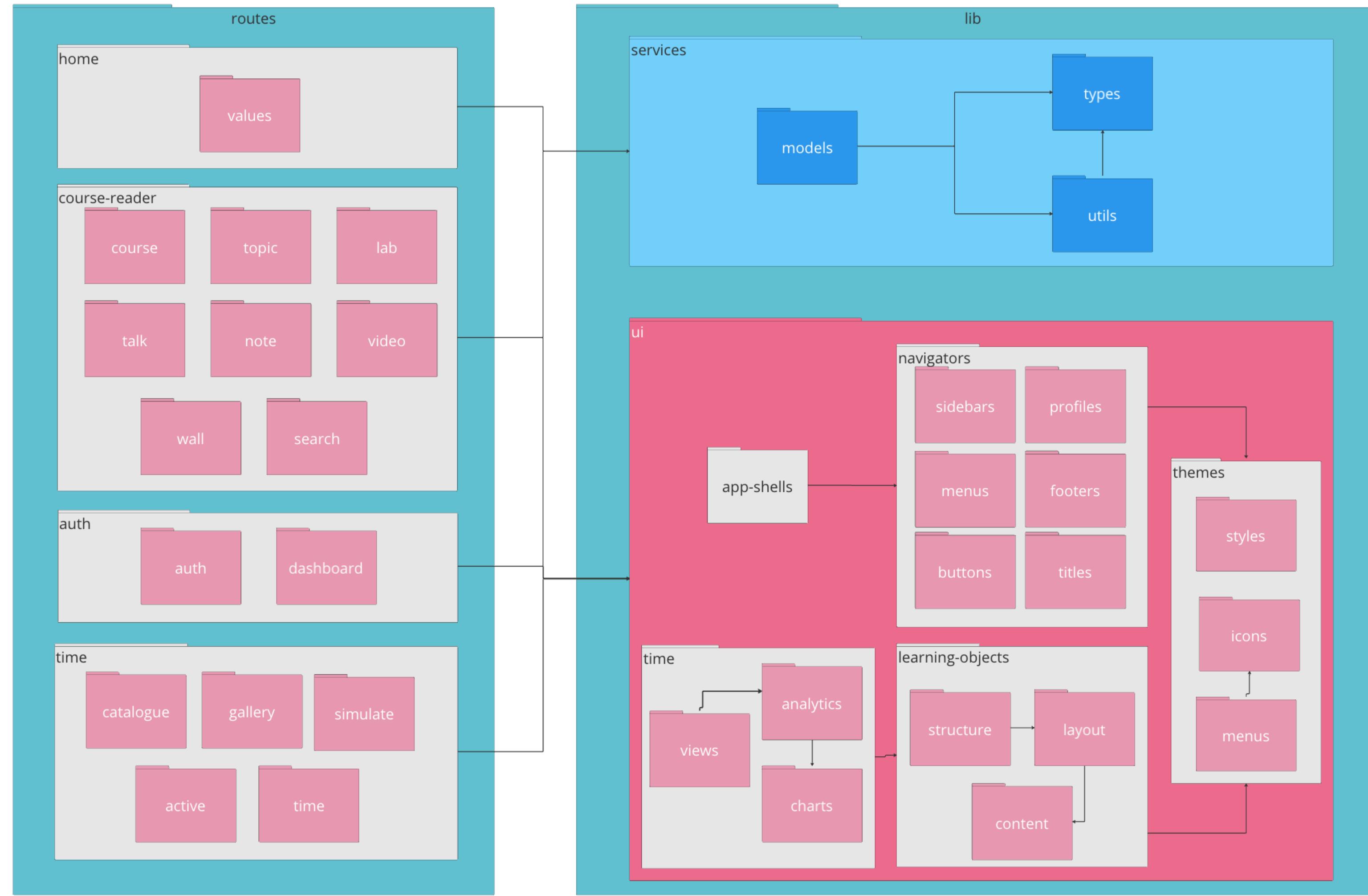


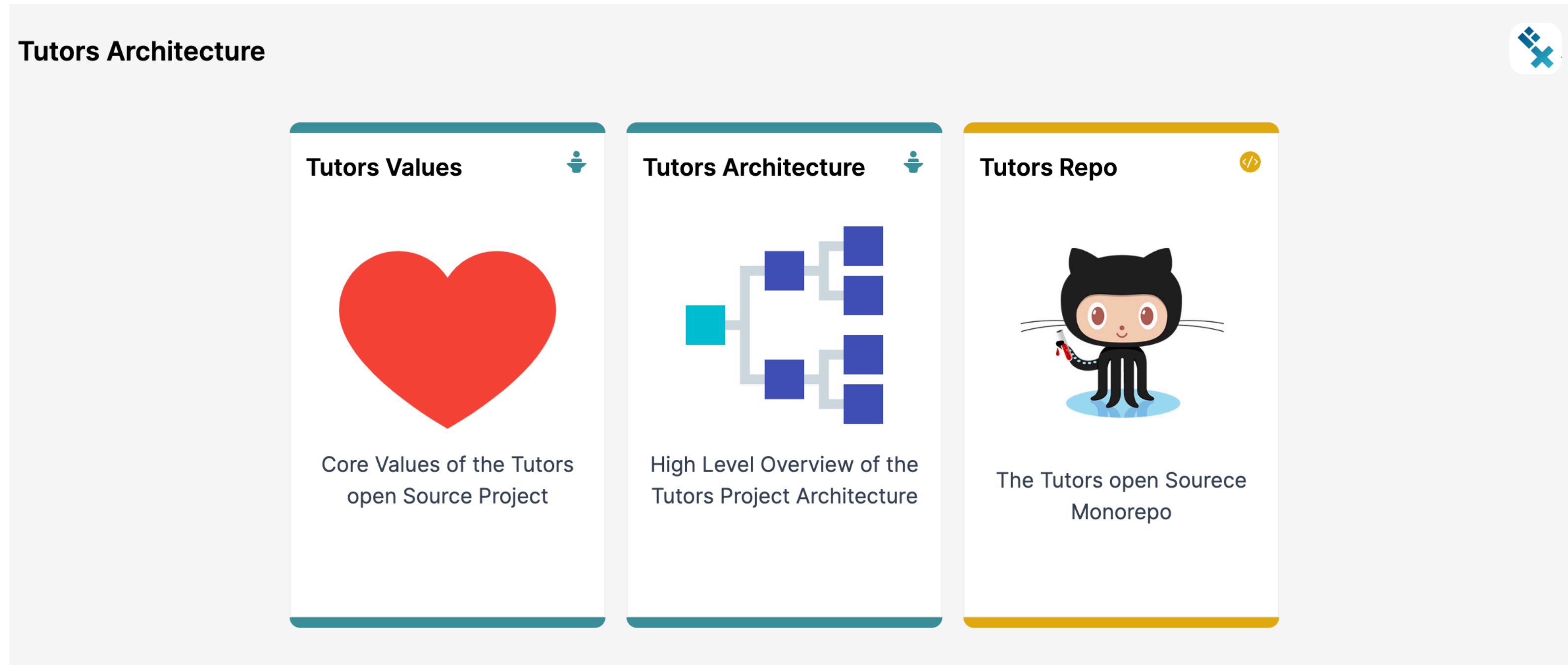
*Figma
Prototyping
Tool*



*Open Source
Figma
Alternative*

```
✓ src
  lib
    services
      > models
      > types
      > utils
      TS analytics.ts
      TS course.ts
      TS firebaseAnalytics.ts
      TS presence.ts
      TS supabaseAnalytics.ts
    > ui
      TS environment.ts
      TS stores.ts
    routes
      > (auth)
      > (course-reader)
      > (home)
      > (time)
      S +error.svelte
      TS +layout.server.ts
      S +layout.svelte
      TS +layout.ts
      TS app.d.ts
      S app.html
      □ app.postcss
      TS hooks.server.ts
    > static
```





Guiding Principles of Tutors

Tutors Architecture

Tutors Source Monorepo

