



# Bremen University of Applied Sciences

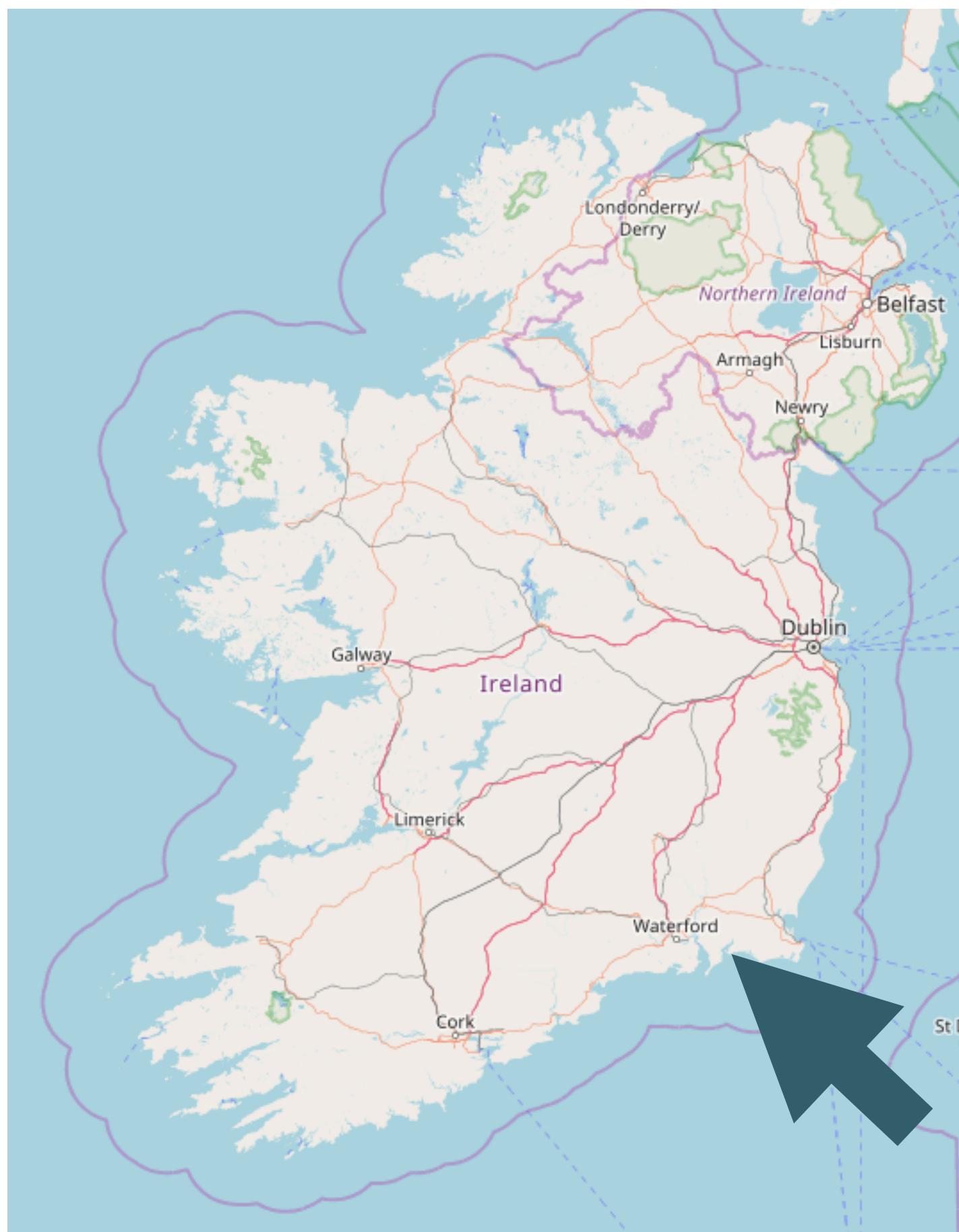
## International Week 2024

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



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# 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<sup>[2][3]</sup> 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.

Demo

Live

Source

Documentation

Gallery

Simulator

The screenshot shows a 'Reference Course' interface with a toolbar at the top featuring icons for search, layout, and other functions. Below the toolbar, there are eight cards illustrating different layout and content types:

- Simple:** Units with presentations, labs + resources.
- Sidebar:** Presentations, links + labs in side bar.
- Videos:** Video + Presentations 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://tutors.dev>

# 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**.

17: Donation Applications  
Full Stack Web Development

Search Layout

full-stack-1-17

Higher Diploma in Computer Science  
Full Stack Web Development

Watch Later Share

Watch on YouTube

Donation Applications

Introducing Donation

Donation Applications

hapi-01-shell

hapi-02-donate

Enter Amount: 0

Select Payment Method:  paypal  direct

Select Candidate:

SPARKS DIPLOMA  
HEA  
Waterford Institute of Technology

Watch on YouTube

Programming Fundamentals  
Colm Dunphy, Peter Windle, WIT

Assignment Specifications

00: Induction

01: First Contact

02: Selection & Iteration

Higher Diploma in Computer Science 2023  
Department of Computing & Mathematics, WIT

HDIP 23

03: Methods

04: Classes

05: Arrays

06: Games

Semester Three: January-June 2024

Workshop Three

Full Stack Web Development 1

Developer Operations

Full Stack Web Development 2

Semester 3 Schedule

Friday January 12th, 2024

cloud computing · scripting · scaling · automation · monitoring

javascript · node · apis · tdd · frameworks · front-end · sveltekit · typescript

javascript · SPA · react · APIs · front-end

timetables · semester calendars · assessment schedules

Labs

Lab-17a Charts

Search Layout

01: Node

02: Hapi.js

03: Joi

04: TDD

05: Models

Models

Mongo DB Fundamentals

- Introducing NoSQL DBs
- Setting Up Mongo
- Accessing Mongo

Mongo Model

SQL Aggregate functions Database

This is a new page:

routes/charts/+page.svelte

```
<script>
  import TitleBar from "$lib/TitleBar";
  import MainNavigator from "$lib/MainNavigator";
  import Chart from "svelte-frappe";
  import { round } from "mathjs";

  let data = {
    chart: {
      title: "Donation Services Inc. Please make a Donation",
      subtitle: "home@sample.com",
      chart_type: "Pie"
    },
    data: [
      { category: "A", value: 100, color: "#F08080" },
      { category: "B", value: 150, color: "#80E0AA" },
      { category: "C", value: 200, color: "#8080E0" }
    ]
  };
</script>
```

Using Round()

- To round a numeric value to a whole number (or to 2 decimal places for example), use `round`.
- `Round(12.75)` returns 13
- `Round(12.7512)` returns 12.75

05: SQL: Select statement

SQL

Select statement

Introduction

SQL Select statement

SQL Select statement Lab

Aggregate functions

SQL Aggregate functions

SQL Aggregate functions Lab

Join clause

SQL Join

SQL Join 1 Lab

SQL Join 2 Lab

Date function

SQL Date functions

SQL Date functions Lab

6



## 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



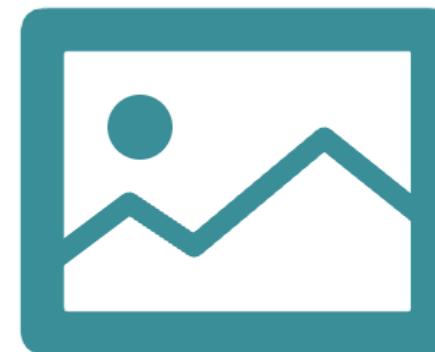
Using Iconify defined icons  
instead of image files

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

# Create & Edit a Tutors Course

## Creating & Publishing a Tutors Course

### Learner Experience



An overview of the Tutors Learner Experience

### Creating a Course



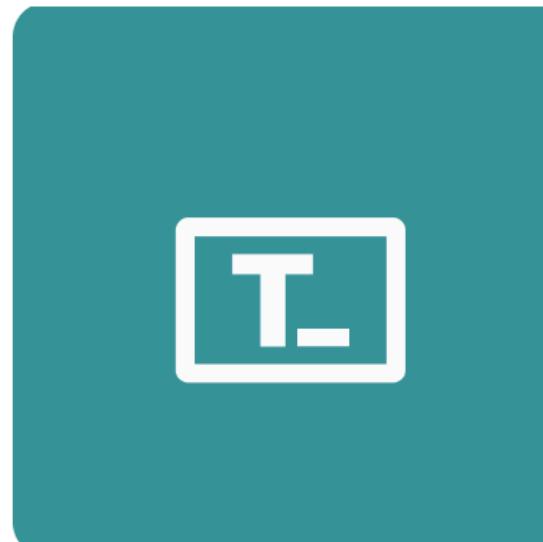
Creating a Tutors Course

### Editing a Course

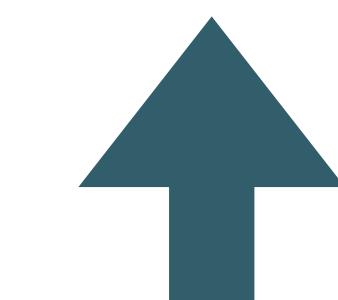


Editing and republishing a course

### Tutors Reference Manual



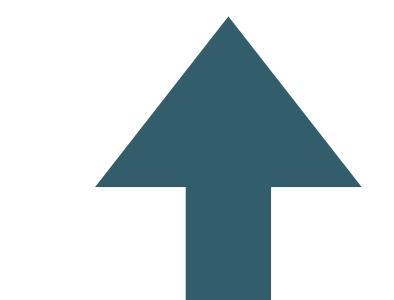
Complete Reference Manual for Tutors



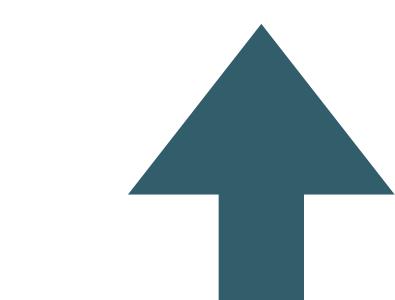
Overview of  
Tutors UX



Overview of  
Course  
Creation



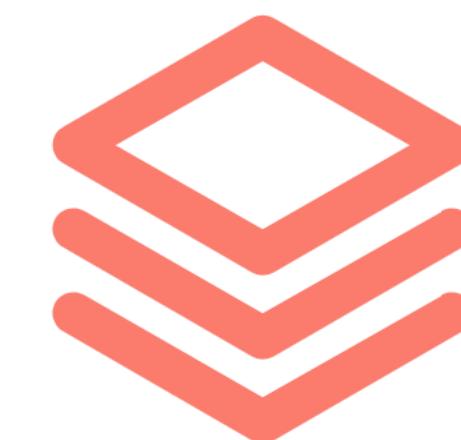
Course  
Structure



Tutors User  
Guide

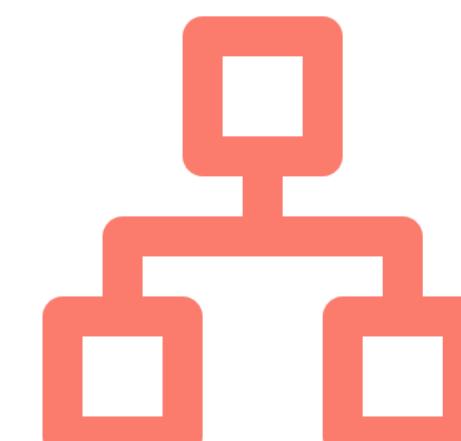
## Tutors Labs

### Create



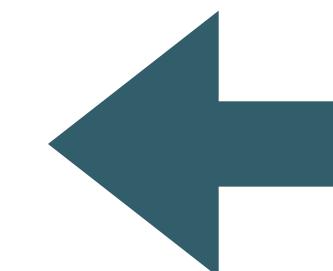
Create and publish a Tutors course

### Edit



Explore and edit the elements of a Tutors course

Guides on  
creating +  
publishing  
a course



# *Tutors Theming*

The screenshot shows a web application interface for "Full Stack Web Development" by Eamonn de Leastar. The top navigation bar includes a profile icon, search bar, and layout options. A dropdown menu titled "Layout" is open, showing "Toggles" (Dark Mode, Compact) and "Themes". The "tutors" theme is selected, highlighted with a green background. Other themes listed are dyslexia, skeleton, seafoam, and vintage. A large blue arrow points from the right towards the theme selector.

**Full Stack Web Development**  
Eamonn de Leastar

Search Layout

0

Edit this Page

Themes

**tutors**

dyslexia

skeleton

seafoam

vintage

01: Node

node.js

The fundamentals of Node. A first Node application.

02: Hapi.js

hapi

The Hapi application Framework

03: Joi

joi

Validation with Joi

04: Test

05: Models

Incorporate Mongo Models

06: Assignment 1

V grading rubric

Concept, detail and grading rubric

07: APIs

API

Expose an API from an application

08: REST

RESTful

Resful API implementations

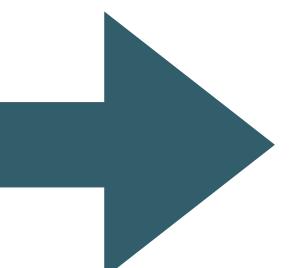
Theme  
Selector

# *Tutors Theming*

The screenshot shows a web application interface for "Full Stack Web Development" by Eamonn de Leistar. The top navigation bar includes icons for help, file, and search, along with a user profile and layout settings. A dropdown menu titled "Layout" is open, showing options for "Toggles" (Dark Mode, Compact), "Themes" (tutors, dyslexia, skeleton, seafoam, vintage), and a "Test" section. The main content area displays eight cards representing different topics: 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 (Test logo, "Test"), 05: Models (MongoDB logo, "Incorporate Mongo Models"), 06: Assignment 1 (Assignment icon, "Concept, detail and grading rubric"), 07: APIs (API icon, "Expose an API from an application"), and 08: REST (RESTful API icon, "Restful API implementations").

*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**

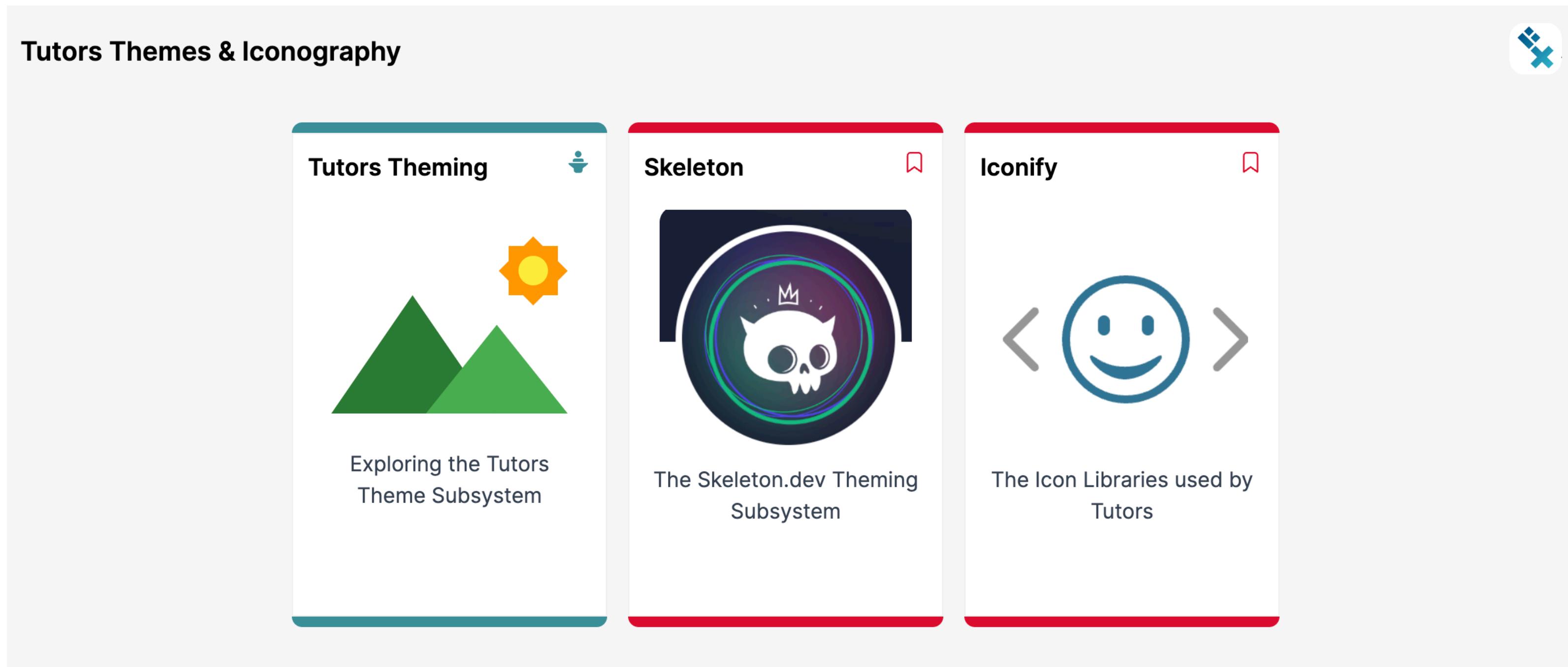
Base: 9999px Container: 8px

**Border Size**

Base: 1px

**Theme designer**

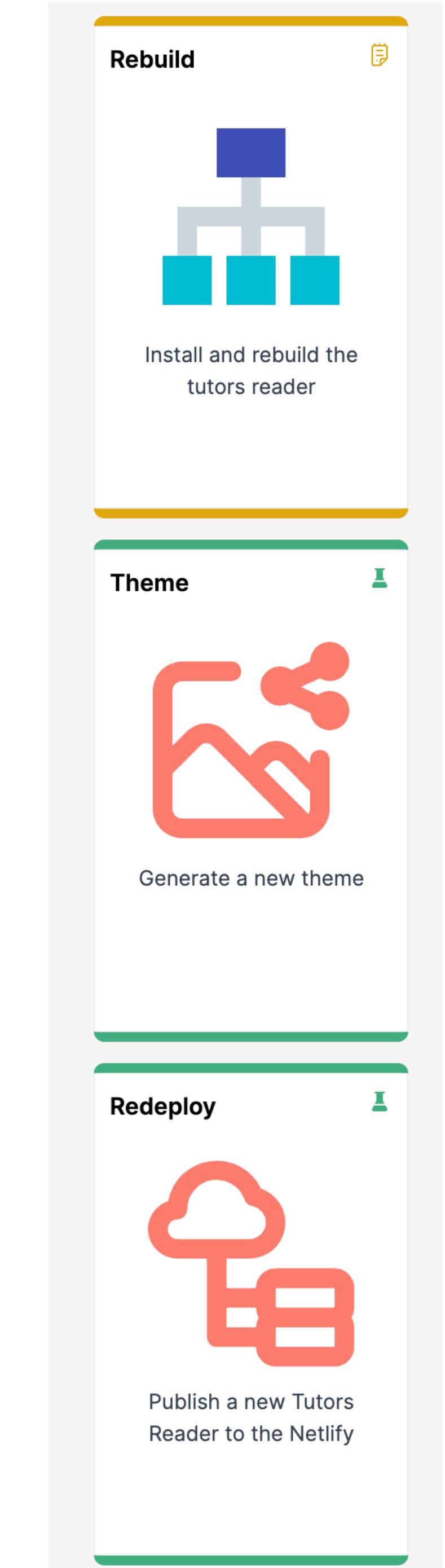
# Tutors Theming



*Overview of  
Tutors Themes*

*Skeleton  
Design  
Systems*

*Icon Library  
used by Tutors*



*Guides on  
Rebuilding,  
Theming &  
deploying  
Tutors*

# Tutors Learning Experience

**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

Watch on YouTube

**Panel Video**

Lecture  
Lecture  
Lab-01

This talk has a pdf + a video with start/end times  
This one just has a video, no PDF  
A regular lab but supported by a video

An example of a side unit  
Learning objects with SVG images  
Panel talk\_promote presentation to topic

**Unit 1 Title**

Panel Video

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

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

**Side Unit**

**Lab-01**  
A set of practical instructions or a walk-through

**Lab-01**  
A set of practical instructions or a walk-through

**Units**

1 of 1  
Tutors Starter Presentation.pdf

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

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

**Lab-01: Objectives**

01: Text  
02: Tables, Lines and Images  
**03: Links and Code Blocks**  
04: Images  
05: Katex  
Exercises: Exercises & Archives

**Note Example**  
A document in Markdown

**Resource I**  
A zipped archive for students to download

**Github Repo 1**  
A repo in github that captures important lessons from this topic

**Web Site**  
A web site of interest

**Lab-01**  
A set of practical instructions or a walk-through

**This is a note with at TOC**

**Lecture 1**  
A short summary of the talk, no more than two sentences. Avoid bullet...

## 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 + '/ajaxlabel.html', nunjucks.render('ajaxlabel.html', {
    url: this.url.substring(5) + '/' + this.folder
  }));

  console.log(this.title);
  this.publishTalks(basePath);
  this.publishLabs(basePath, course);
}
```

**Note Example**  
A document in Markdown

**Resource I**  
A zipped archive for students to download

**Github Repo 1**  
A repo in github that captures important lessons from this topic

**Web Site**  
A web site of interest

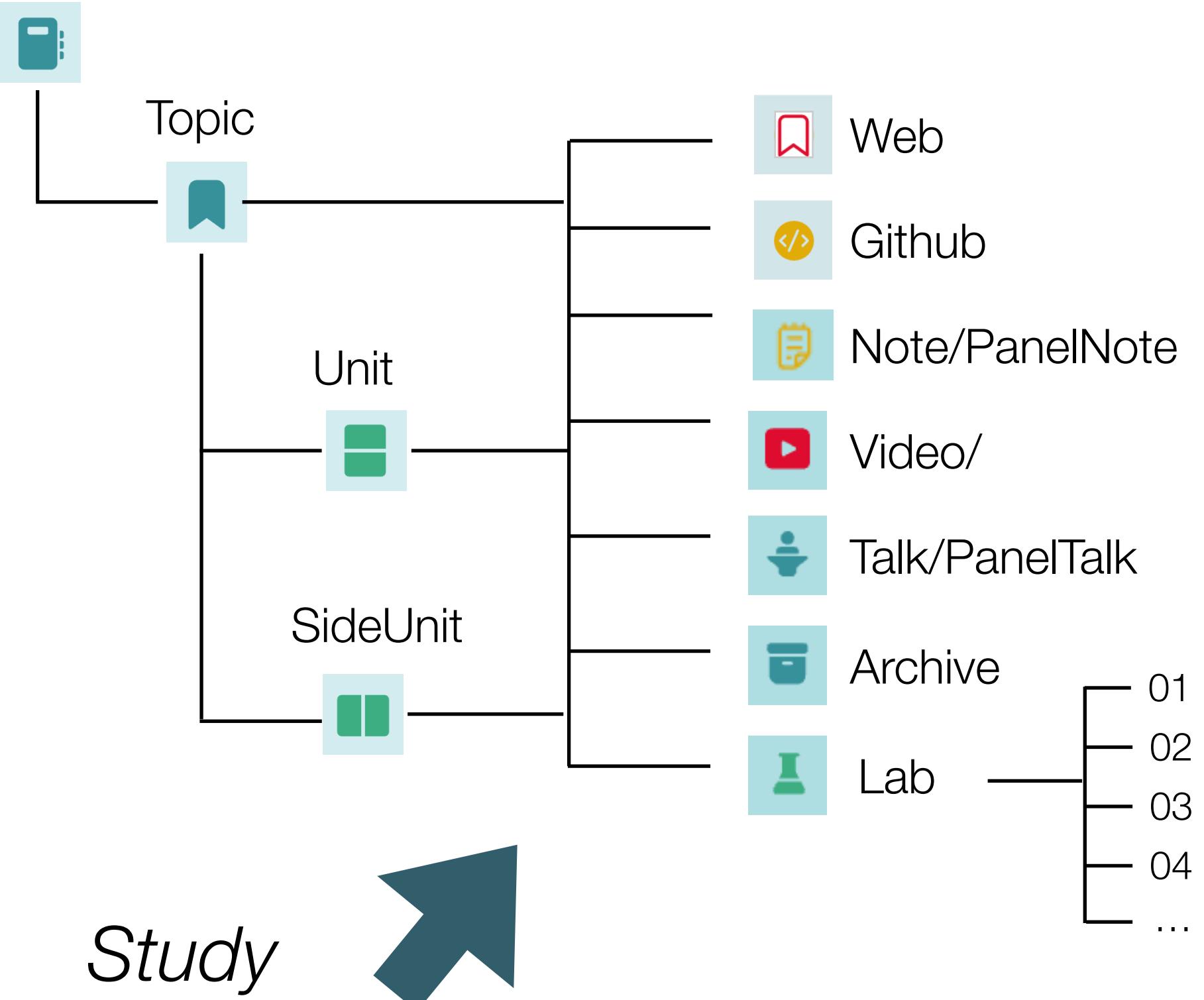
**Lab-01**  
A set of practical instructions or a walk-through

**This is a note with at TOC**

**Lecture 1**  
A short summary of the talk, no more than two sentences. Avoid bullet...

# Tutors Learning Experience

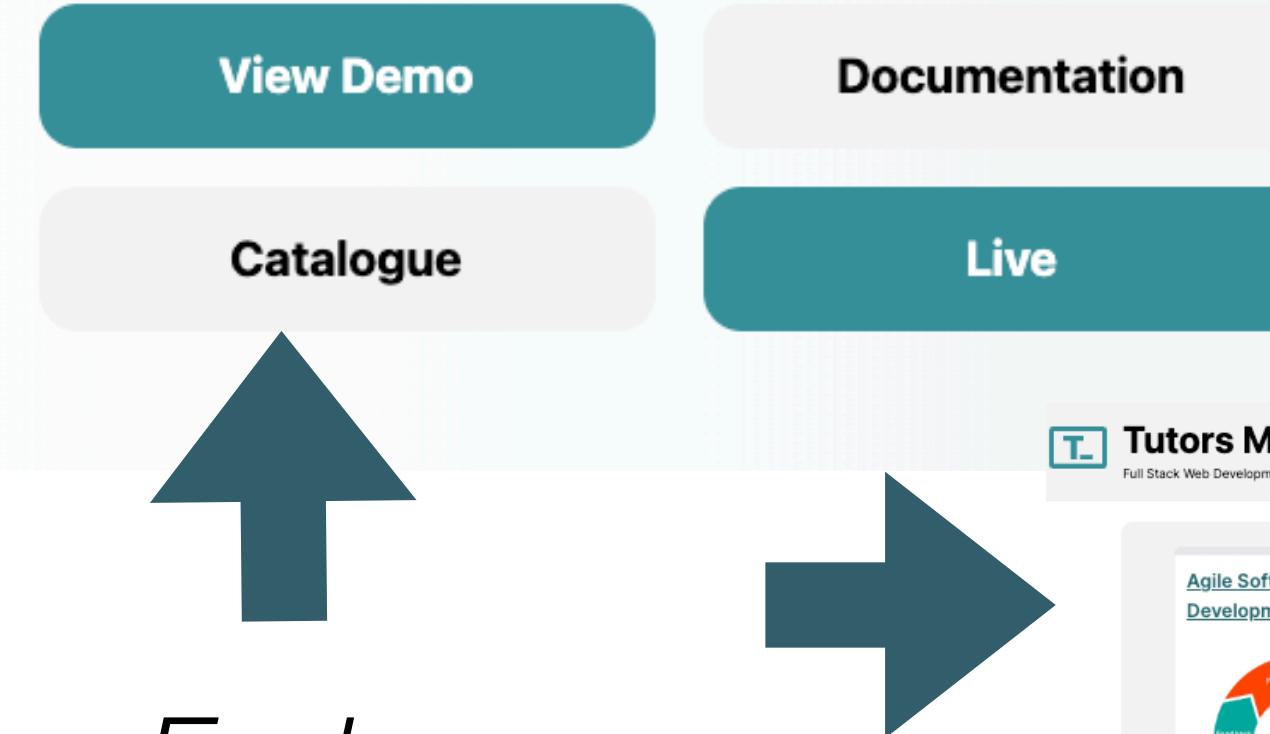
Course



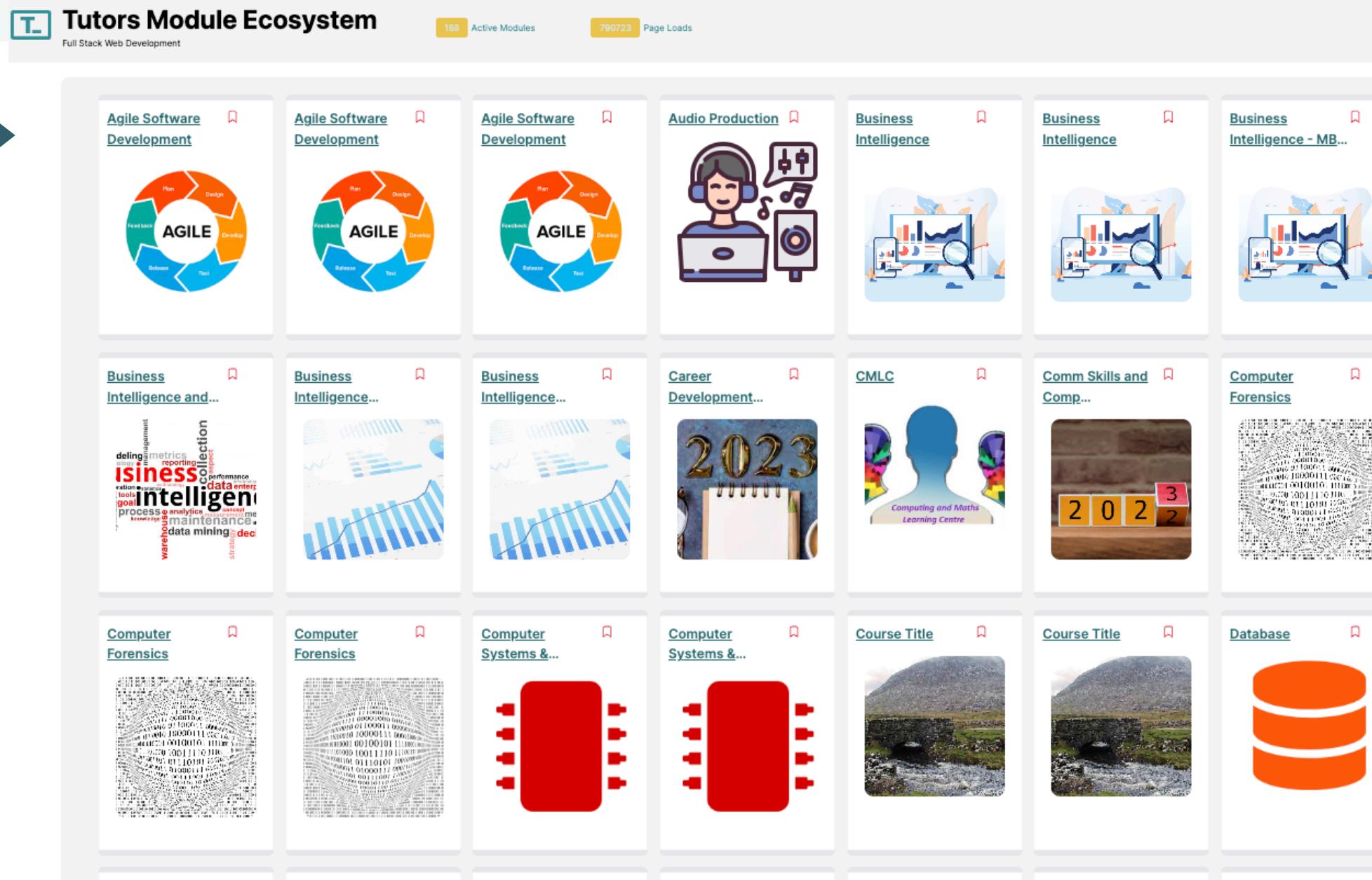
*Study  
Course  
Structure*

## 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*



# *Tutors Learning Experience*

**Tutors Learning Experience**

**Tutors Module Catalogue**

A large collection of Tutors Modules

**Tutors Example Programme**

HDIP 22

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

**Figma**

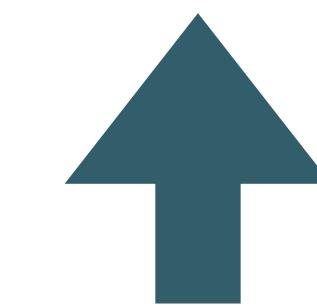
A design/prototyping tool

**Penpot**

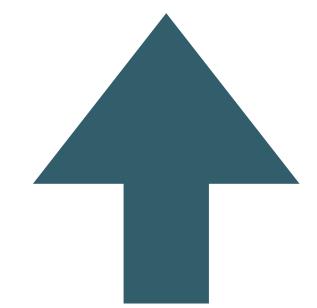
An Open Source Alternative to Figma



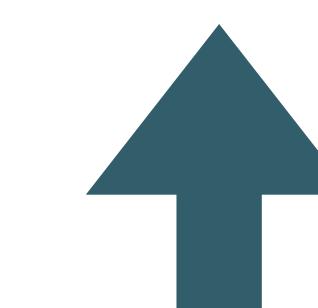
*Tutors Module Catalogue*



*Complete  
Multi-Course  
Programme*



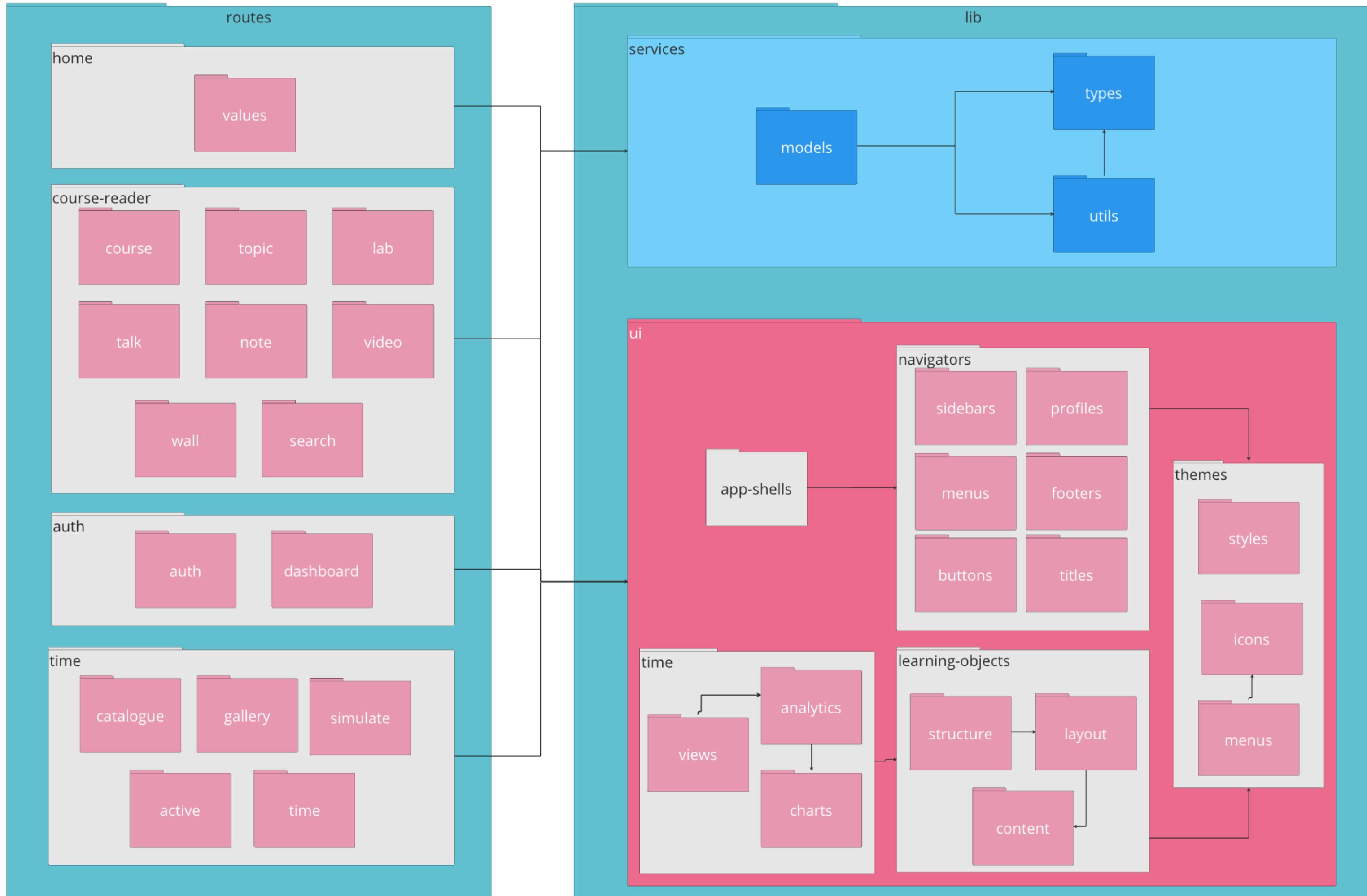
*Figma  
Prototyping  
Tool*



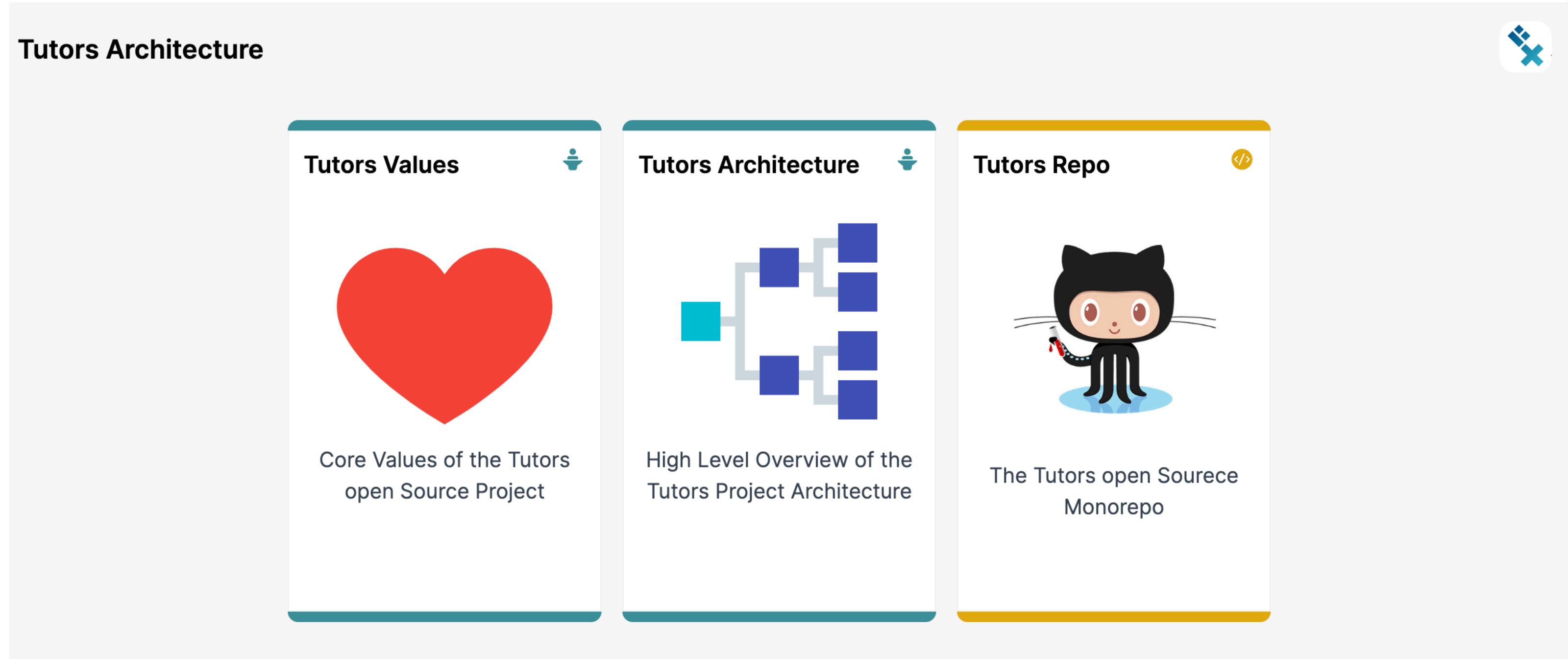
*Open Source  
Figma  
Alternative*

# Tutors Architecture

```
✓ 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
        D app.postcss
        TS hooks.server.ts
      > static
```



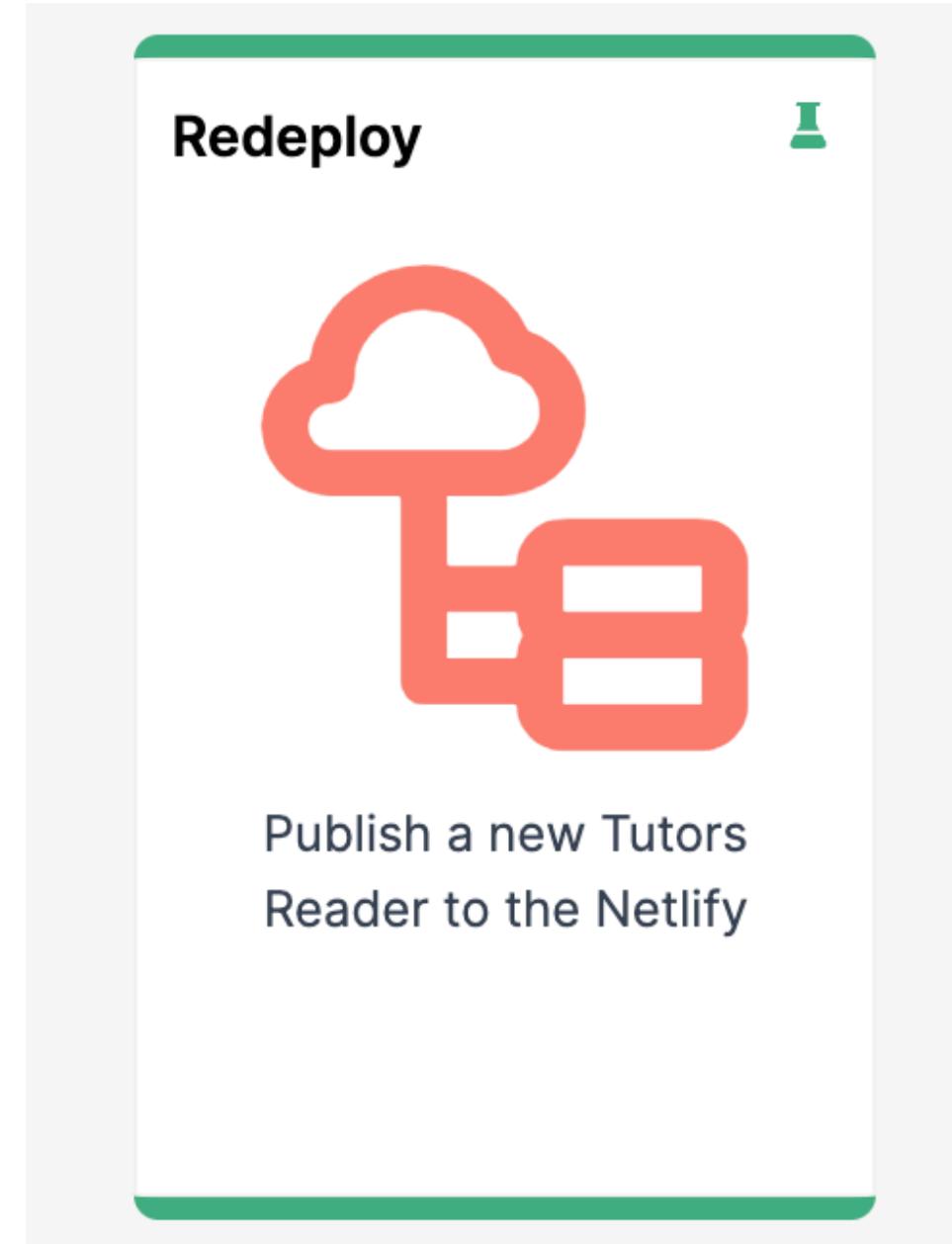
# Tutors Architecture



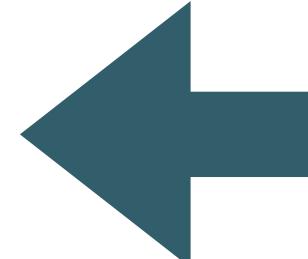
↑  
*Guiding  
Principles of  
Tutors*

↑  
*Tutors  
Architecture*

↑  
*Tutors Source  
Monorepo*

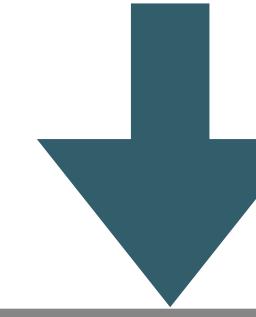
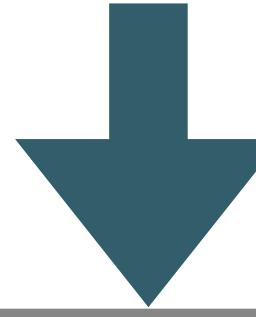
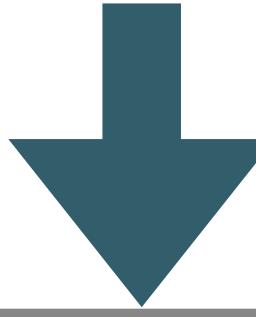
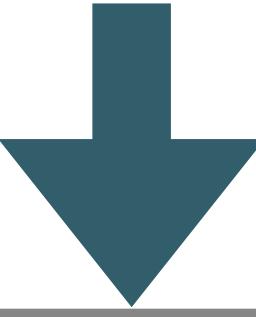


*Deploying  
a new  
Tutors  
Reader*



| International Week 2024 Preliminary Time Table |  |  |   |  |   |  |   |                                    |  |  |                                    |
|--|--|--|---|--|---|--|---|------------------------------------|--|--|------------------------------------|
|  | Mon June 17  |  | Tue June 18                                 |  | Wed June 19                                   |  | Thu June 20                                 |                                    | Fri June 21                                      |  | Sat June 22                        |
| 08:00-9:30<br>(Block 1)                        |  |  |   |  |   |  |   |                                    |  |  |                                    |
| 09:45-11:15<br>(Block2)                        | Welcome Session 119<br>(Teachers and GJU Students)   |  | Block Courses<br>A1 220<br>A2 116<br>A3 32B |  | time for individual meetings<br>220, 305      |  | Block Courses<br>A1 116<br>A2 32A<br>A3 305 |                                    | Block Courses<br>A1 220<br>A2 221<br>A3 305      |  | Sightseeing / Museum /Art (Guests) |
| 11:30-13:00<br>(Block3)                        | Block Courses<br>A1 220<br>A2 221<br>A3 305  |  |   |  | 220, 305                                      |  |   | Student Work (without supervision) |  |  |                                    |
| 13:00-13:30                                    | Lunchbreak   |  | Lunchbreak                                  |  | Lunchbreak                                    |  | Lunchbreak                                  |                                    | Lunchbreak                                       |  | Lunchbreak                         |
| 13:30-15:00<br>(Block4)                        | Block Courses:<br>A1 220<br>A2 221<br>A3 305   |  | Block Courses<br>A1 220<br>A2 116<br>A3 32B |  | Future Now!<br>Research Workshop*<br>(Guests) |  | Student Work (without supervision)          |                                    | Student Presentation Courses A1-3<br>DIL Mitte** |  | Further Activities or Departure    |
| 15:15-16:45<br>(Block5)                        | Student Work (without supervision)   |  | Student Work (without supervision)          |  | Digital Impact Lab Mitte**                    |  | A1 220<br>A2 012<br>A3 305                  |                                    | Poster Session                                   |  |                                    |
| 17:00-open end                                 |  |  |   |  | Reception (Guests)                            |  |   |                                    | Student Social Event                             |  |                                    |
|  | A1 Ala' Khalifeh (GJU, Jordan): AI Generative Tools Workshop   |  |   |  |   |  |   |                                    |  |  |                                    |
|  | A2 Eamonn de Leastar (SETU, Ireland): Tutors Workshop Web Development  |  |   |  |   |  |   |                                    |  |  |                                    |
|  | A3 Gábor Kiss (Obuda, Hungary): AI in Practice   |  |   |  |   |  |   |                                    |  |  |                                    |
|  | *Wed. is no schedule for HSB students. Rooms 220 and 305 can be used for meetings and projec work.                         |  |   |  |   |  |   |                                    |  |  |                                    |
|  | **Digital Impact Lab Mitte, Papenstraße 6, <a href="https://impact-lab.eu/dil-mitte/">https://impact-lab.eu/dil-mitte/</a> |  |   |  |   |  |   |                                    |  |  |                                    |

# Tutors Workshop Programme

|       | Monday  | Tuesday  | Thursday  | Friday   |
|-------|---|--|---|--|
| 9:45  | <i>Learn</i><br> | <i>Explore</i><br> | <i>Create</i><br> | <i>Present</i><br> |
| 11:30 |   | Tutors Theming & Iconography   | Tutors Showcase Site  |  |
| 13:30 | Explore The Tutors Project  | Tutors Learning Experience   | Comprehensive course on using Tutors  | Prepare and Present Achievement & Learning   |
| 15:15 | Create and Edit a new Tutors Course   | Tutors Design System   | Reimagined Tutors Learning Experience   |  |
|       |   | Tutors Architecture  |   |  |

# Tutors Workshop Programme

| Monday   | Tuesday                                  | Thursday  | Friday            |
|--|--|---|-------------------|
| 9:45<br>Welcome  | Create, deploy and Present Sample Course | Tutors Architecture   | Review & Feedback |
| 11:30<br>Introducing Tutors  | Theming & Iconography Introduction       | (a) Develop Course on using Tutors<br>(b) Reimagine the Tutors UX |                   |
| 13:30<br>Lab: Create<br>Lab: Edit  | Lab: Rebuild<br>Lab: Theme               |   | Presentations     |
| 15:15<br><i>Form groups( 2-4 ) + Agree and Research Domain of interest</i> | <i>Implement new Theme + Icon Set</i>    | <i>Design &amp; Implement Either (a) or (b) or (?)</i>            |                   |
| 16:45  |  |   |                   |