

Tutors



An open source platform
for structuring and
publishing lecture, lab and
video material for a course



A Programme Home Page

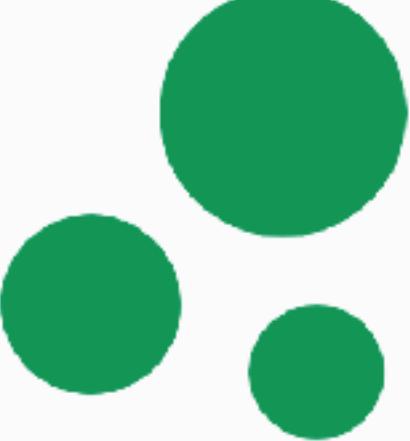
Access to all
resources +
Modules

Higher Diploma in Computer Science 2022
Department of Computing & Mathematics, WIT

Current Week
3

Semester One

HDIP 22

- Workshop One 
induction · structure · schedules · handbook
- Life etc... 
time · space · balance · experiences · tips · techniques
- Web Development 
html · css · layout · web apps · web frameworks · deployment
- Programming 
algorithms · data structures · processing · java · classes · libraries
- Semester 1 Schedule 
timetables · semester calendars · assessment schedules



Navigator

The screenshot displays a dark-themed user interface, likely from a web browser or learning platform. At the top, there is a navigation bar with the following elements from left to right:

- A blue circular icon with a white 'i'.
- A small thumbnail image of a person's face.
- A magnifying glass icon for search.
- A blue square icon with a white 'T'.
- An orange circular icon with a white 'O'.
- A green three-dot menu icon.
- A profile picture of a man with glasses.
- A black three-dot menu icon.

The main content area shows the title "03: Box & Grid" and "Web Development" in large white font. To the left of the title is a small diagram illustrating the box model with labels: "Content", "padding", "border", and "margin". Below the title is a breadcrumb navigation path: a green house icon, followed by a right arrow, then "Web Development", another right arrow, and finally a blue bookmark icon followed by "03: Box & Grid". On the far right of the main content area are two sets of circular icons: a red speech bubble, an orange graduation cap, a red play button, a teal download arrow, and a green chess king.



Companions

The screenshot shows a dark-themed web interface for a course titled "03: Box & Grid Web Development". The top navigation bar includes icons for search, user profile, and other settings. Below the title is a breadcrumb trail: Home > Web Development > 03: Box & Grid. To the right of the breadcrumb trail are four circular icons representing different resources: a red speech bubble for Slack channel, an orange graduation cap for Moodle resources, a red play button for YouTube playlist, and a blue download icon.

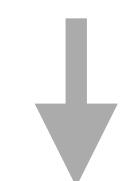
Slack
channel
Moodle
resources

Youtube
playlist



Navigation

Module
Syllabus

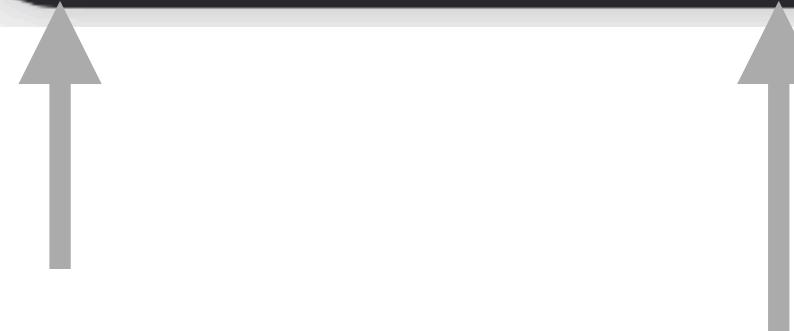


The screenshot shows a dark-themed web interface. At the top is a navigation bar with icons for search, module selection, and user profile. Below it is a breadcrumb trail: Home > Web Development > 03: Box & Grid. The main content area displays the title "03: Box & Grid" and "Web Development". A small diagram illustrating box model components like margin, padding, border, and content is visible.

Programme
Home

Current
Module
Home

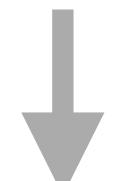
03: Box & Grid
Web Development



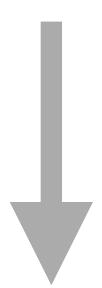
Current
Topic



Labs Text
Search



Module
Index

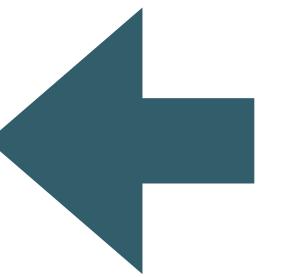


All
All
Labs
Slides





UX



Change
Theme

*Switch to
Compact
Layout*

The screenshot shows a dark-themed web browser window. At the top, there's a navigation bar with icons for search, theme switcher (set to 'black'), user profile, and more. Below the navigation bar is the main content area, which displays the title '03: Box & Grid' and 'Web Development'. To the left of the title is a small diagram illustrating the box model. The URL bar at the bottom shows the path: Home > Web Development > 03: Box & Grid.



Time/Live

03: Box & Grid
Web Development

> Web Development > 03: Box & Grid

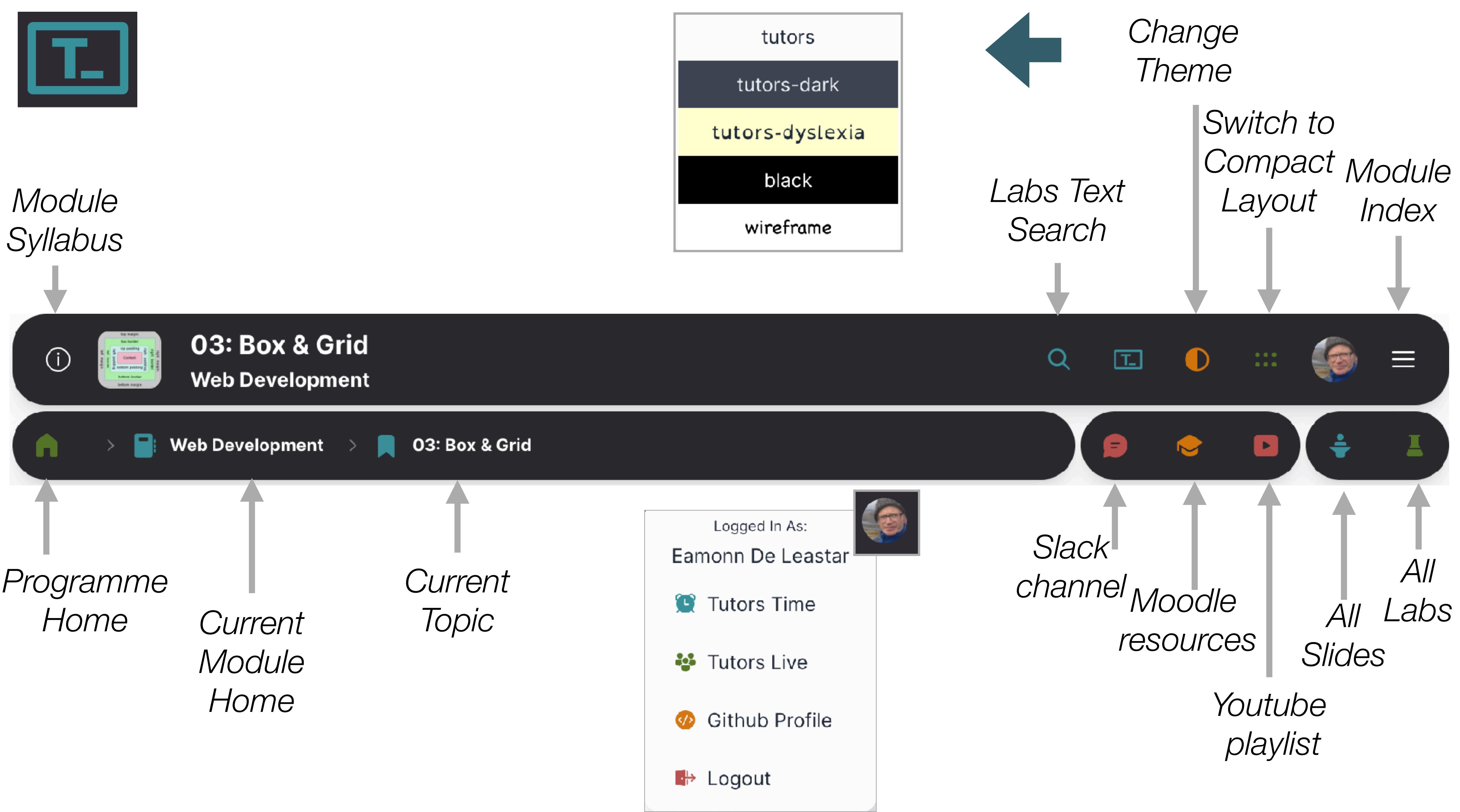
Logged In As:
Eamonn De Leastar

Tutors Time

Tutors Live

Github Profile

Logout





Semester One

HDIP
22

Workshop One



induction · structure ·
schedules · handbook

Life etc...



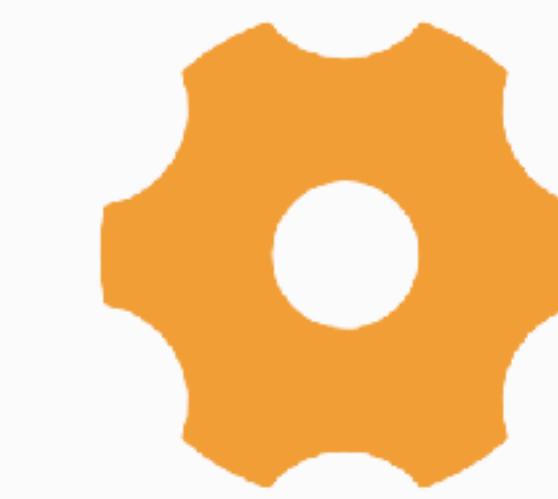
time · space · balance ·
experiences · tips ·
techniques

Web Development



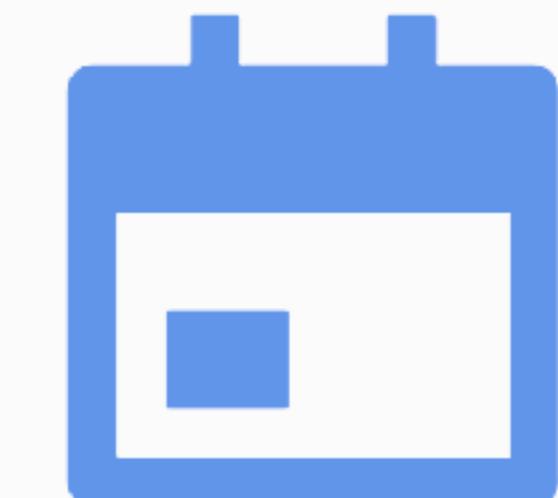
html · css · layout · web
apps · web frameworks ·
deployment

Programming

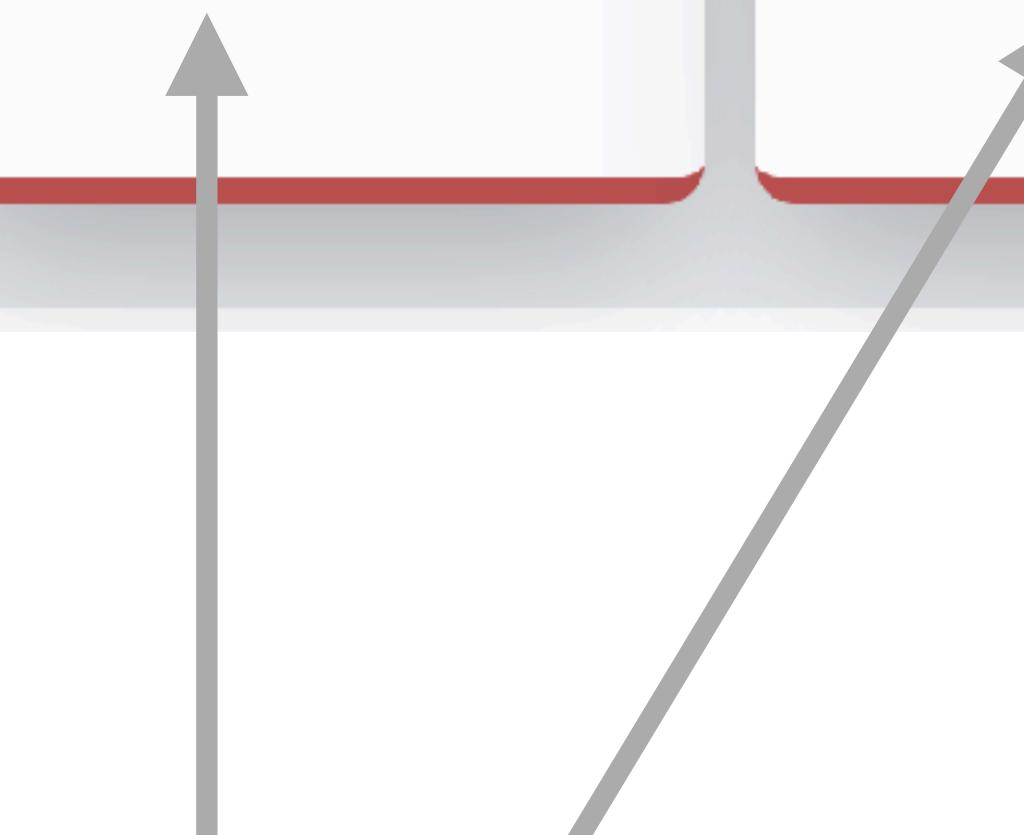


algorithms · data
structures · processing ·
java · classes · libraries

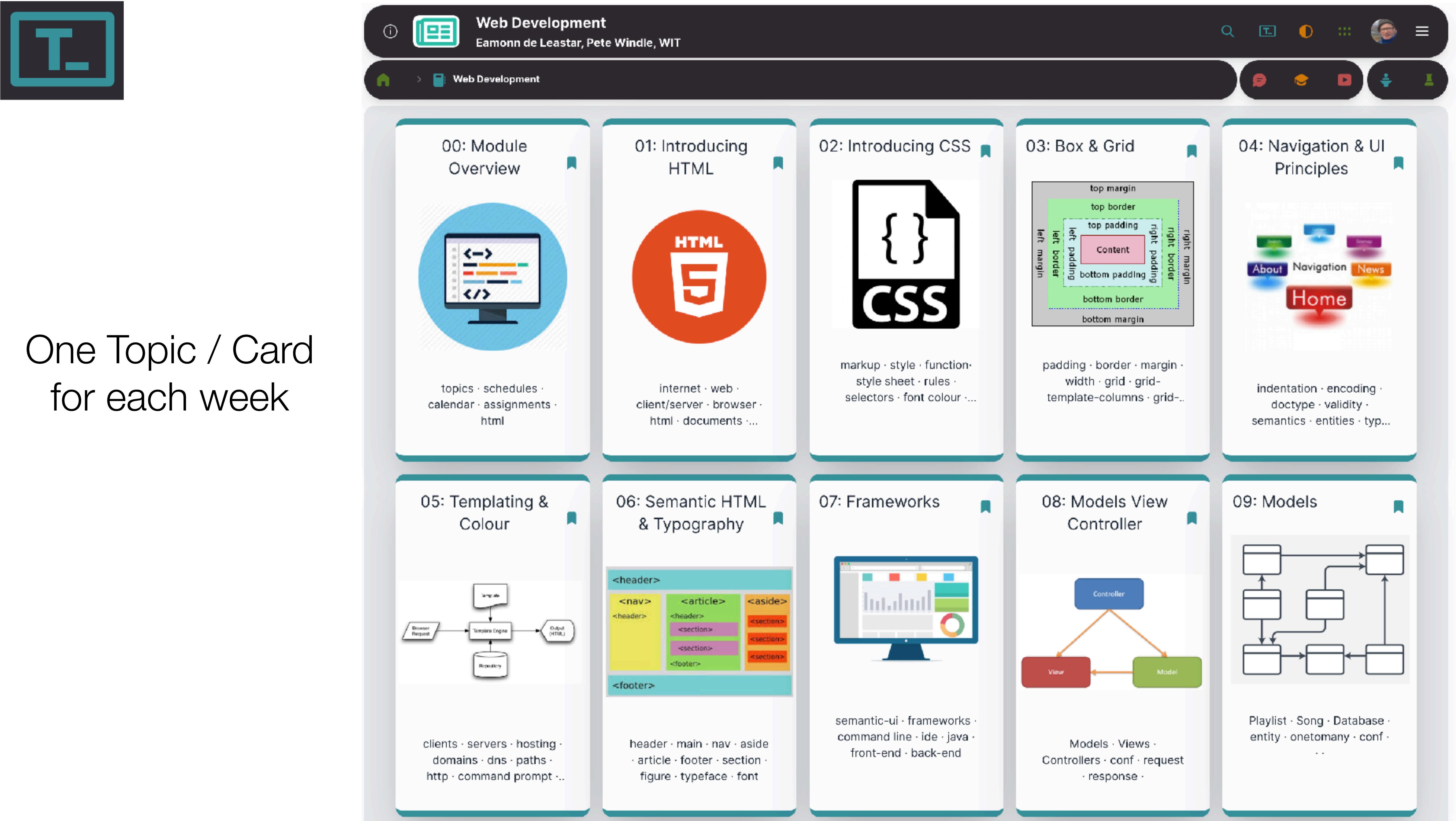
Semester 1 Schedule



timetables · semester
calendars · assessment
schedules



Links to Individual Module
Home Pages



One Topic / Card
for each week



Single topic
(1 week)

02: Database Design - Logical

Concepts

Introduction

Relational Model

Methodology

Logical Database Design 1

Worked Example

Worked Example Solution

Logical Data Modelling Lab

Topic Video

Sub Topic 1

Sub Topic 2

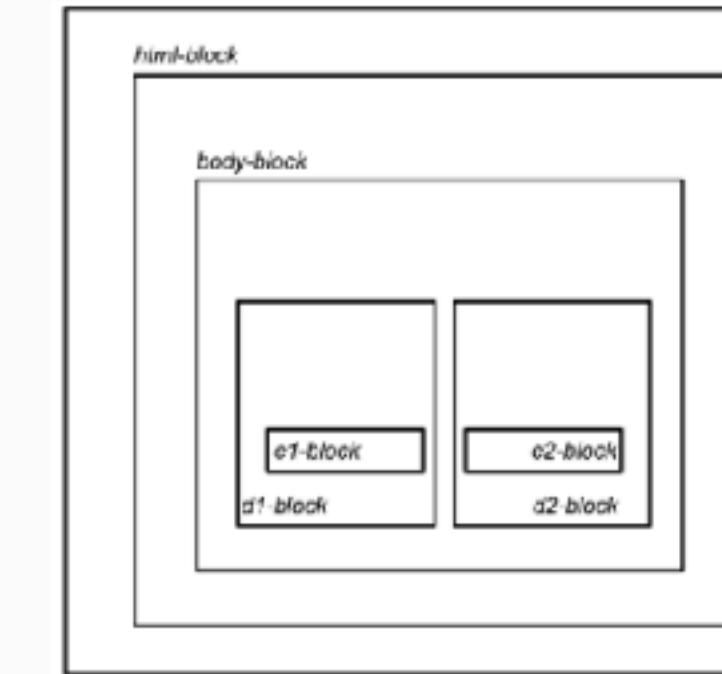


Subtopic

Layout

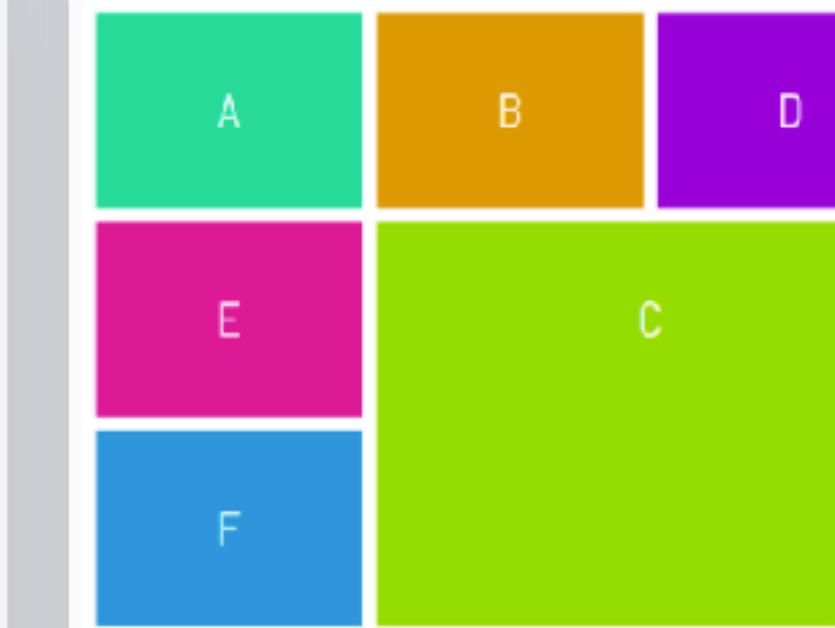


Box Layout



Some important characteristics of the box model layout rules.

Grid



The new Grid standard support a clean, simple way of defining multi-...

Lab-03b Multicolumn

LOREM IPSUM DOLOR SIT

<ul style="list-style-type: none">MaurisCrasProinIntegerCaracterIntegerSuspendisseQuisque	<p>Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Sed feugiat nisi at sapien. Phasellus varius incident ligula. Praesent nisi. Duis sollicitudin. Donec dignissim, est vel auctor blandit, ante est laoreet neque, non pellentesque mauris turpis eu purus.</p> <p>Suspendisse mollis leo nec diam. Vestibulum pulvinar tellus sit amet nulla fringilla semper. Aenean aliquam, urna et accumsan sollicitudin, tellus pede lobortis velit, nec placerat dolor pede nec nibh. Donec fringilla. Duis adipiscing diam at enim. Vestibulum nibh.</p>
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header · maincontent ·
navigation · footer ·
primary · secondary

Slide PDFs

Lab



Introduction Database

Database > 02: Logical Database Desi... > Concepts > Introduction

1 of 1

Logical Database Design

Introduction

02: Logical Database Design

Logical Database Design

E-R Diagram

Relational Data Model

- 02: Database Design - Logical
- Concepts
- Introduction
- Relational Model
- Methodology
- Logical Database Design 1
- Worked Example
- Worked Example Solution
- Logical Data Modelling Lab
- Final Steps
- Logical Database Design 2

Topic
Navigator

Topic
Resources



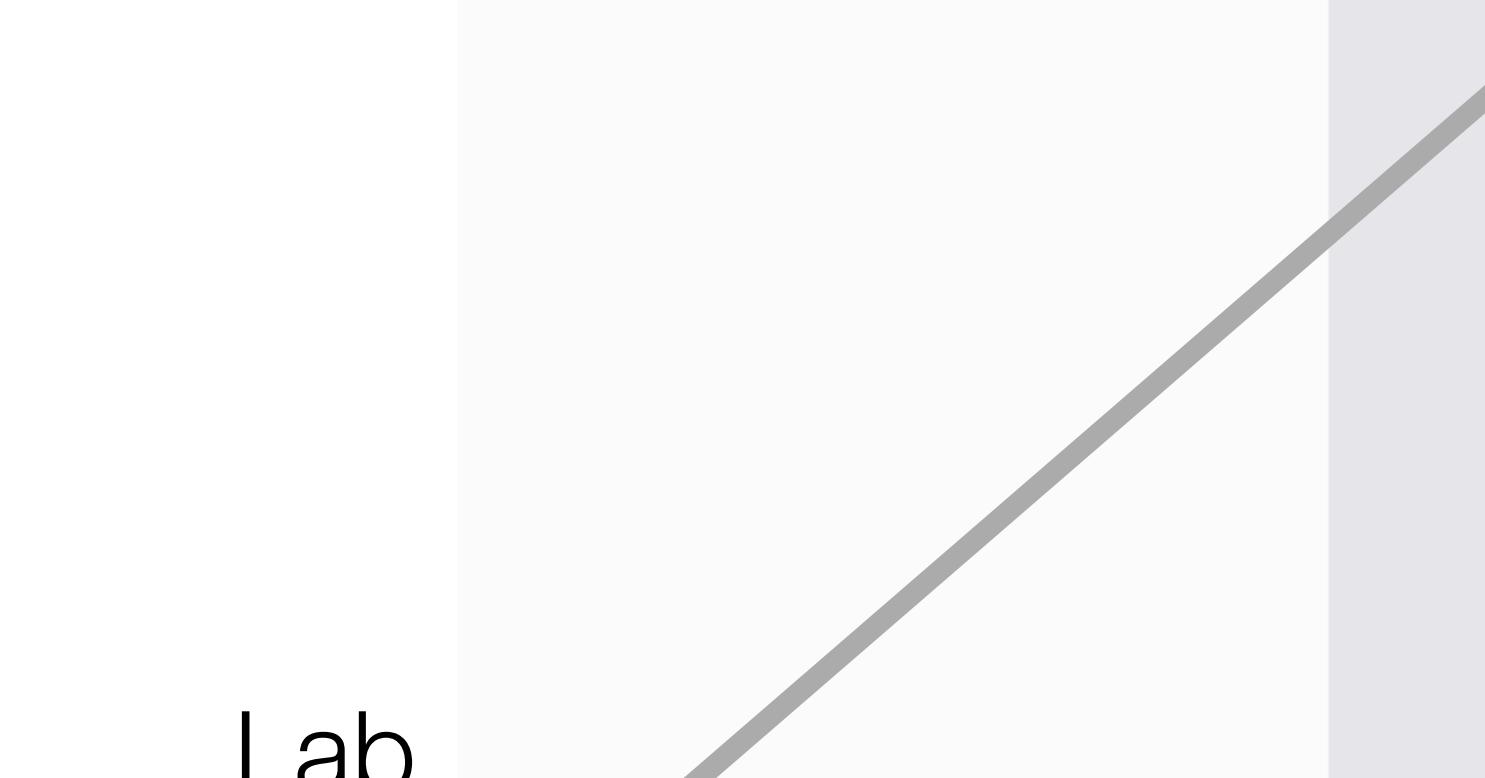
Lab-02b CSS Paths & Links
Web Development

Web Development > 02: Introducing CSS > CSS Fundamentals > Lab-02b CSS Paths & Links

Search icon, Filter icon, Filter icon, More icon, User profile icon, Home icon, Chat icon, Email icon, YouTube icon, Help icon, User icon

Lab

Lab Steps
+ Exercises



Lab
Instructions

Objectives

Setup

Relative Paths I

Relative Paths II

Classes

Indentation

Exercises

Indentation

We should carefully inspect our html and verify that we are laying it out correctly, and in particular that we are obeying consistent indentation rules in the structure of the html itself.

Indentation is simply a consistent placement of spaces before each element, such that it flows in an ordered manner reflecting the opening/closing of tags. We prefer to use 2 spaces for each 'level'.

Example Inconsistent indentation:

```
<html>
  <head>
    <title>APP Store</title>
    <link type="text/css" rel="stylesheet" href="style.css" media="screen" />
  </head>
  <body>
    
    <h1>Score: Apps, Movies, Music, Books</h1>
    <ol>
      <li><a href="apps.html">Apps</a></li>
      <li><a href="music.html">Music</a></li>
      <li><a href="movies.html">Movies</a></li>
    </ol>
    <h2>New Games</h2>
    <ul>
      <li>Clear All</li>
      <li>Squinks</li>
    </ul>
  </body>
</html>
```



Live Stream

Live stream of
webinar for given
topic



08: Messaging
Computer Systems & Networks

Computer Systems & Netw... > 08: Messaging

Application Layer, IoT Massaging

2021 Computer Systems and Networks

Device/Service Discovery

MORE VIDEOS

4:33 / 1:35:38

Watch later Share

- Automatic detection of devices and services on a computer network (usually a LAN).
- Requires a common language for interoperability.
- Many different protocols, based on physical layer implementations and domains:
 - Dynamic Host Configuration Protocol (DHCP)
 - Bluetooth Service Discovery Protocol (SDP)
 - Universal Description Discovery and Integration (UDDI)
 - [Simple Service Discovery Protocol \(SSDP\)](#)

YouTube

07: Application Layer: Messaging

Slides & Labs for
the topic



MQTT and HTTP

Publisher → MQTT Broker → Subscriber

Data Representation · Publish Subscribe · Web APIs

Lab Messaging

Broker

Use MQTT to connect a device

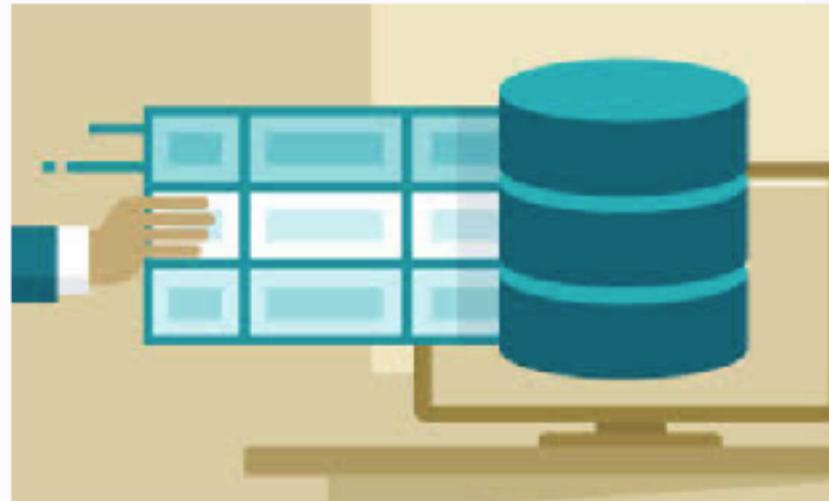


Physical database design



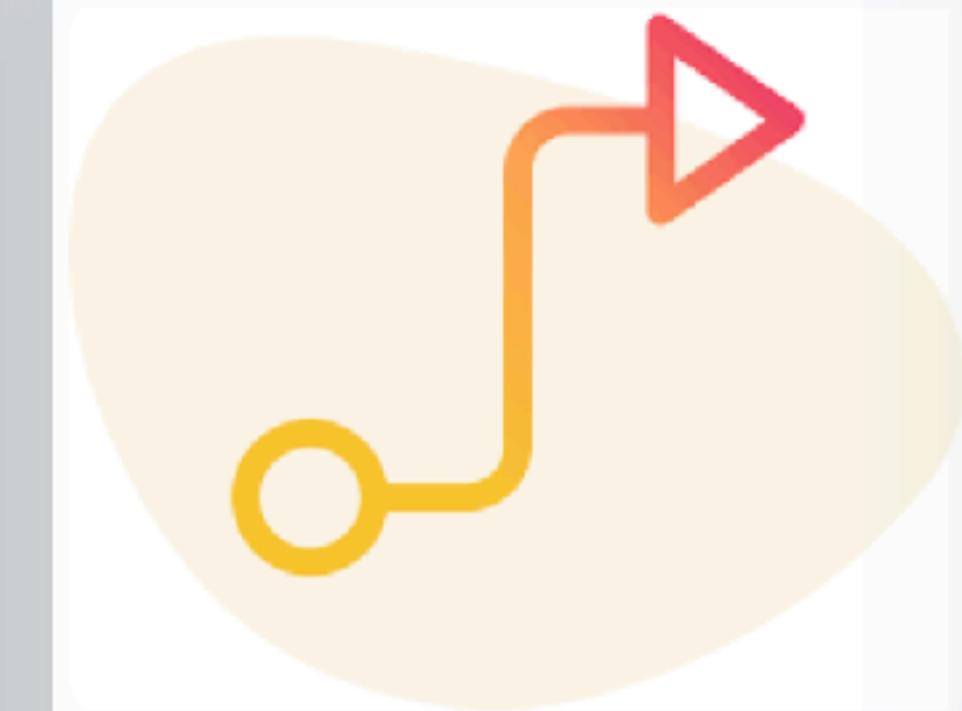
Pre-recorded
Videos for
selected slides
& labs

Physical Database Design



In this lecture we describe
a physical database...

Triggers



This lecture explains the
use of triggers in MySQL

Triggers Lab

```
SQLQuery1.sql - SH...C\Shreeharsh (52)* X
CREATE TRIGGER InsertAccounts
    ON PersonalDetails
    FOR INSERT
AS
BEGIN
    INSERT INTO Accounts
        (Salary, PPFReduction, PersonalDetailsId)
    VALUES
        (0, 0, SCOPE_IDENTITY())
END
110 % < > Messages
Command(s) completed successfully.
```

In this lab, we will look at
Triggers

Tutors

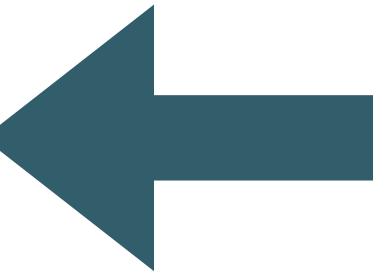
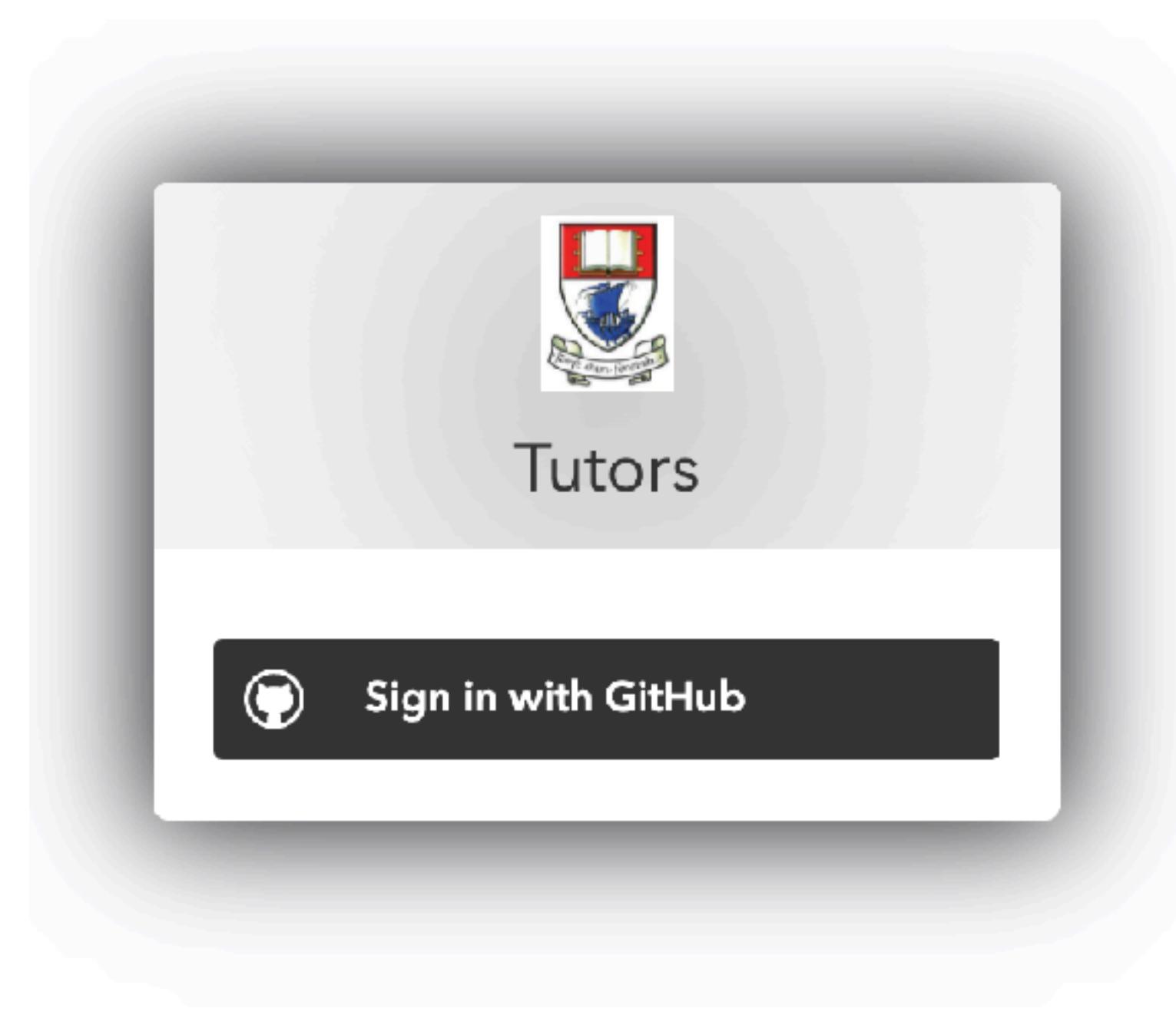


TutorsTime

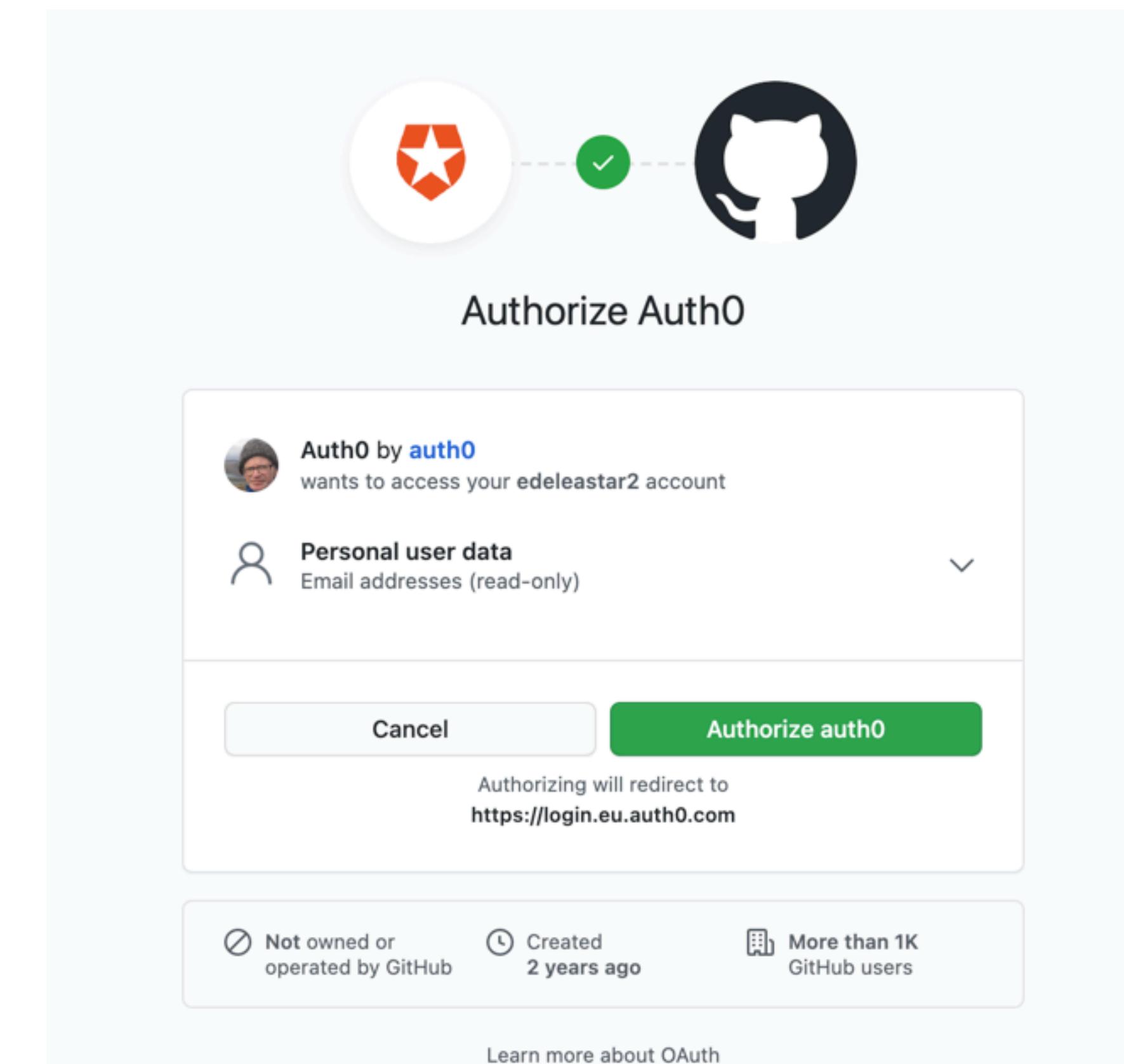


TutorsLive

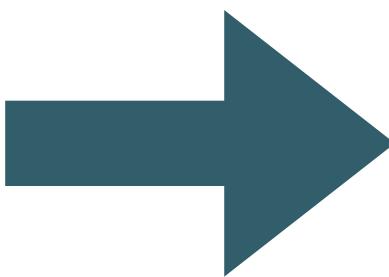




When accessing module, you will be asked to sign in with Github



... first time you will have to authorise ...



Github Profile

Screenshot of a GitHub profile page for user 'edeleastar2'.

The top navigation bar includes: Search or jump to..., Pull requests, Issues, Marketplace, Explore, a notifications icon, a '+' button, and a user profile picture.

A message通知: Your profile picture has been updated. It may take a few moments to update across the site. (X)

The main content area is titled Public profile.

Left sidebar menu (Profile tab selected):

- Profile
- Account
- Appearance (New)
- Account security
- Billing & plans
- Security log
- Security & analysis

Main profile details:

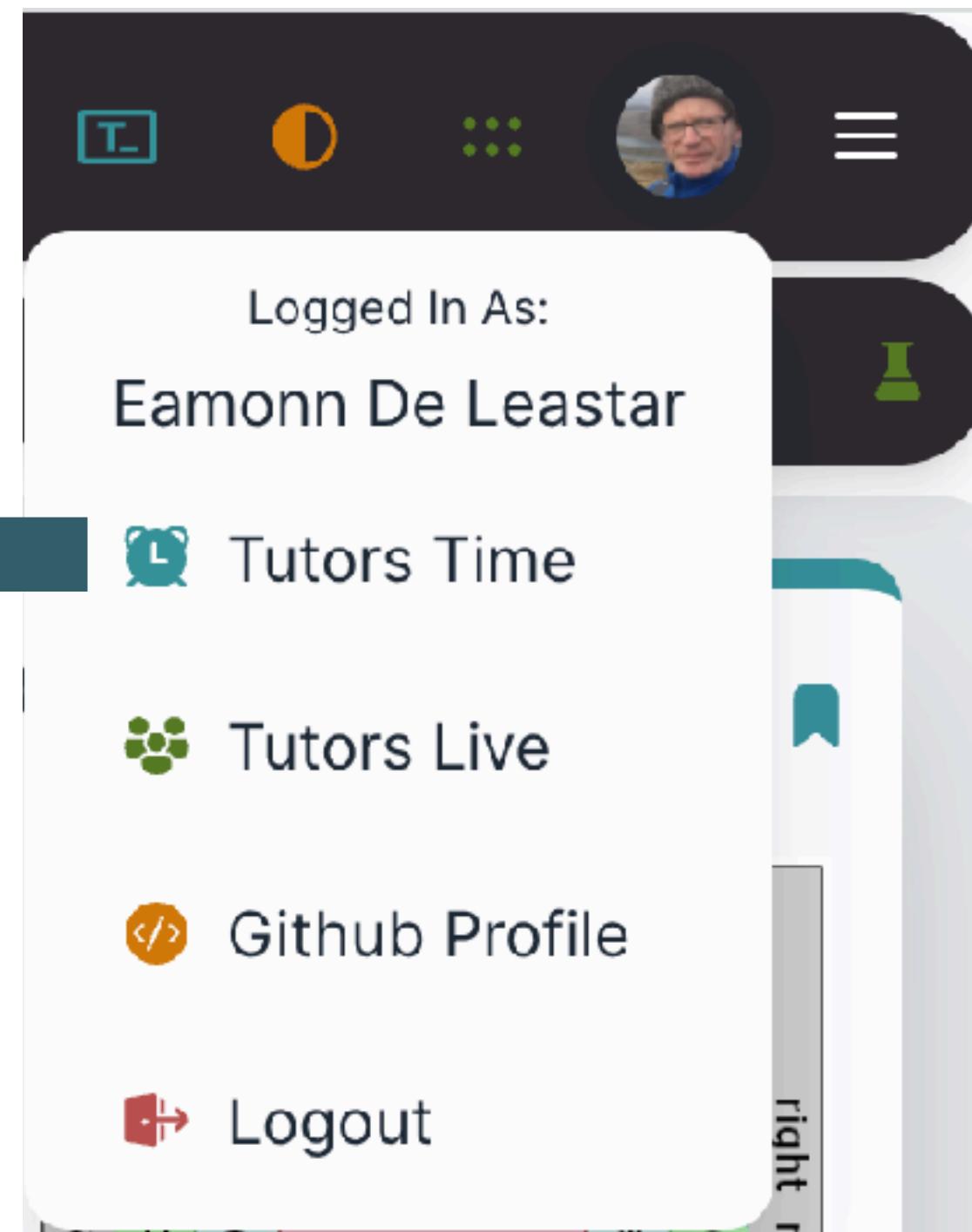
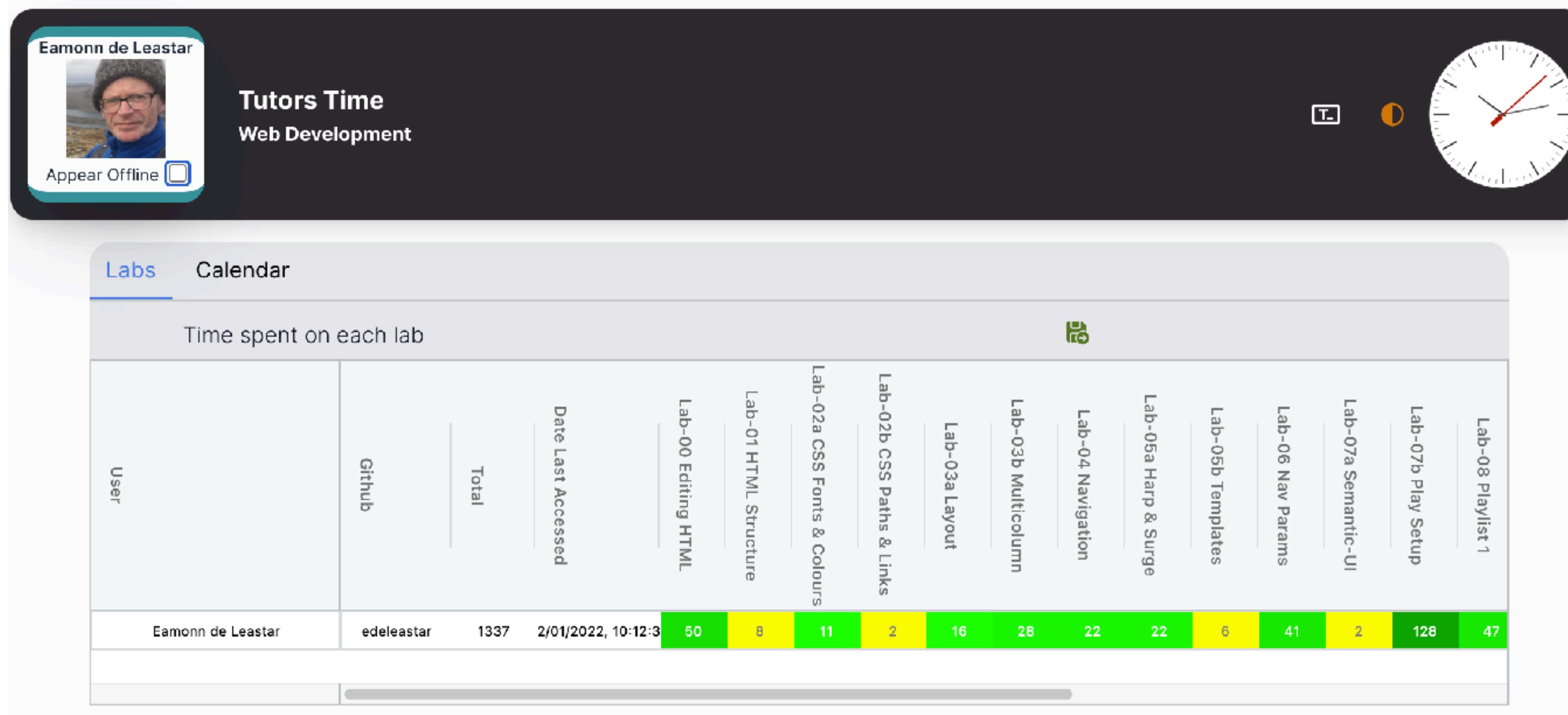
Name: Eamonn de Leastar
Profile picture: A circular photo of a man wearing glasses and a dark beanie, set against a backdrop of a body of water and hills.

Public email: Select a verified email to display ▾
A note: You have set your email address to private. To toggle email privacy, go to [email settings](#) and uncheck "Keep my email address private."

Bio: (empty)



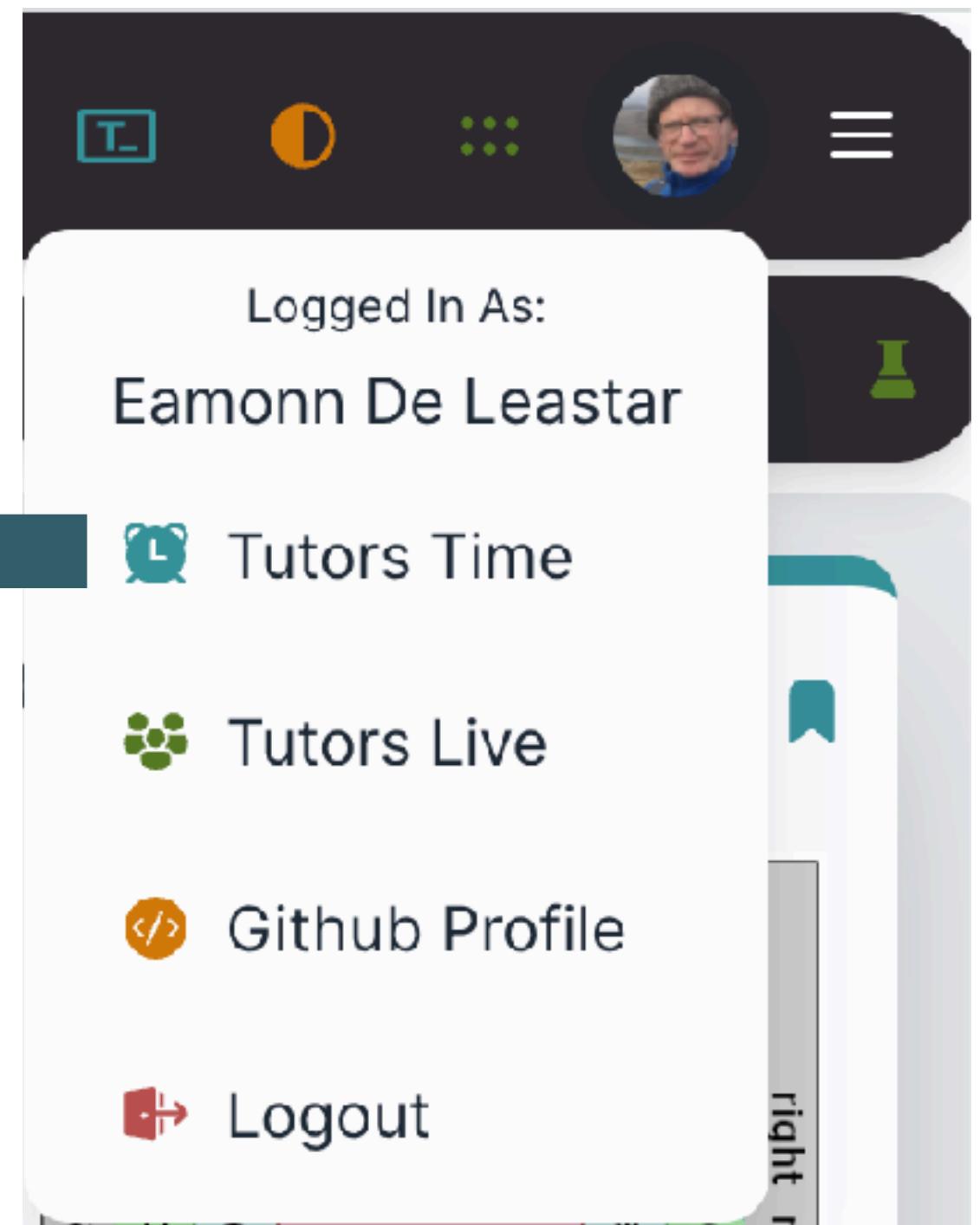
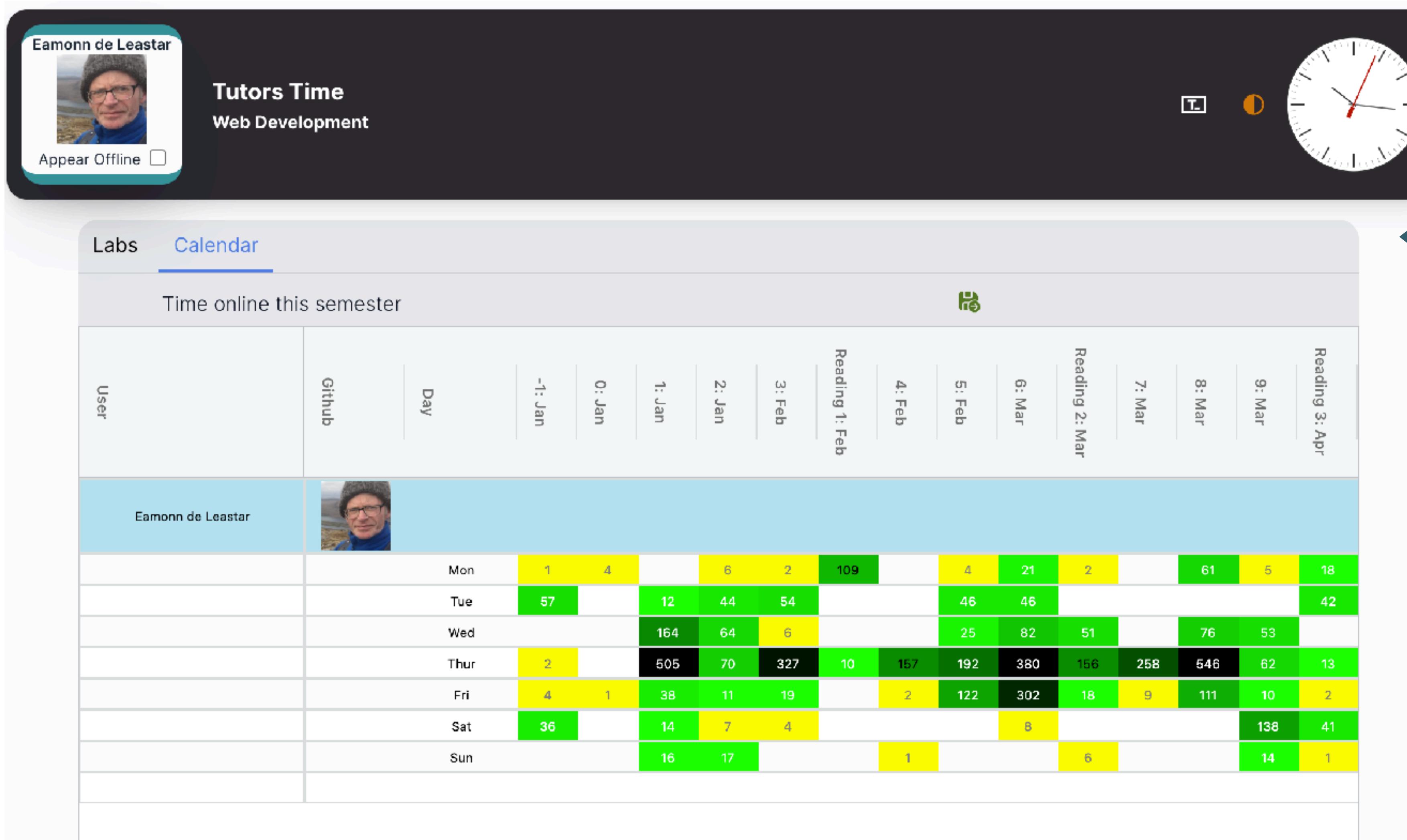
TutorsTime - Labs



Number of minutes the Each lab has been active in your browser (estimate)



TutorsTime - Calendar



Number of minutes
the the Course has
been active in your
browser (estimate)

The screenshot shows a web application interface for monitoring student activity. At the top left, a profile card for "Eamonn de Leastar" displays a photo, name, and an "Appear Offline" button with a checkbox. The main title is "Tutors Live: Web Development" under "Web Development". On the right, a sidebar shows the user is logged in as "Eamonn De Leastar" with icons for "Tutors Time", "Tutors Live", "Github Profile", and "Logout". A large blue arrow points upwards from the sidebar towards the top left. Below the title, six student cards are displayed in a grid:

- Joe**: Shows a pink profile picture, a diagram of an array with indices 0-3, and a message box: "Message X Welcome to your swing and array lab".
 - Topic: 05: Arrays
 - Lab: Lab-05a
- Mary**: Shows a yellow profile picture, a tree diagram of a class hierarchy, and a string "ABCDEFBC".
 - Topic: 04: Classes
 - Lab: Lab-04a
- Mike**: Shows a teal profile picture, an array diagram with indices 0-3, and a message box: "Message X Welcome to your swing and array lab".
 - Topic: 05: Arrays
 - Lab: Lab-05a
- Frank**: Shows a pink profile picture, an array diagram with indices 0-3, and a message box: "Message X Welcome to your swing and array lab".
 - Topic: 05: Arrays
 - Lab: Lab-05a
- Elizabeth**: Shows a yellow profile picture, an array diagram with indices 0-3, and a message box: "Message X Welcome to your swing and array lab".
 - Topic: 05: Arrays
 - Lab: Lab-05a
- Sean**: Shows a teal profile picture, an array diagram with indices 0-3, and a message box: "Message X Welcome to your swing and array lab".
 - Topic: 05: Arrays
 - Lab: Lab-05a

A large blue arrow points downwards from the sidebar towards the bottom right.

You may choose to not appear on this page if you prefer to 'appear offline'

Any students currently online will appear here, indicating the topic/lab they may be working on



Welcome to the website of the Tutors Open Source Project

The Tutors Open Source Project is a collection of software packages developed to create and deliver online courses, through lectures, labs, videos & course materials. It is currently used to run over 160 courses.

[VIEW DOCUMENTATION](#)

[VIEW ON GITHUB](#)

Contributors



Eamonn De Leastar



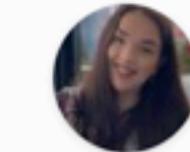
Colm Dunphy



Jordan Harrison



Ben Capper



Emma Kidney



Pete Windle



<https://tutors-docs.netlify.app>

Tutors Documentation
Tutors Team

Tutors Documentation

Create Design Accessibility Source

The screenshot displays the homepage of the Tutors Documentation website. At the top, there's a dark header with the "Tutors Documentation" logo and "Tutors Team" text. Below the header is a navigation bar with icons for search, filter, and more. The main content area features four cards: "Create" (with a blue and red icon), "Design" (with a painter icon), "Accessibility" (with a lock icon), and "Source" (with a green compass icon). Each card has a brief description below it.

Create	Design	Accessibility	Source
Creating, editing and publishing a course	Explore the Design of Tutors	What does it mean and why is it important	Sample Courses + Tutors Open Source Project