Mini Meco Introduction

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ADAP A01

Agenda

1. Mini Meco
2. Current state
3. Goal state
4. Homework

1. Mini Meco

Mini Meco Vision

Mini Meco is a web app to support our project based teaching

Base Design

Mini Meco is a web app to support our project based teaching

An admin (professor) can create courses (by semester)

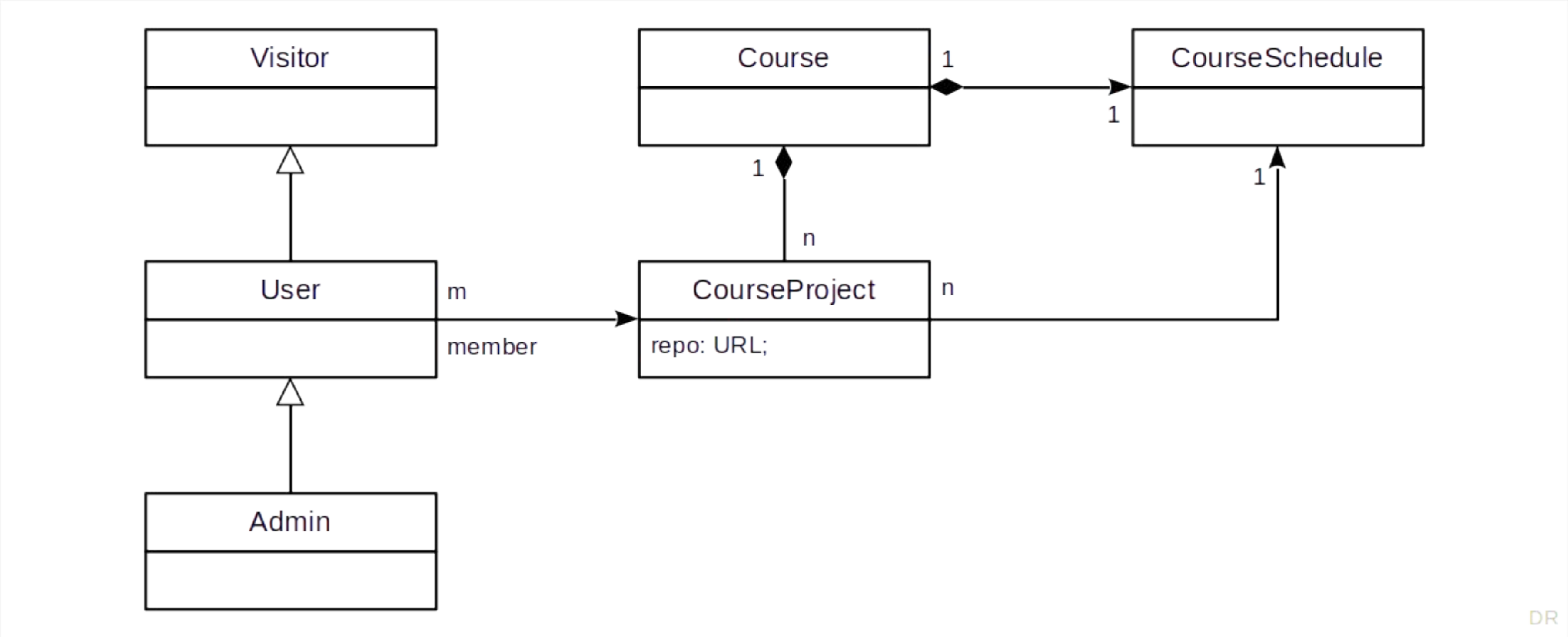
Courses have an associated schedule (homework delivery dates)

Regular users (students) can create projects and add them to courses

A project can have one or more members (ADAP = 1, AMOS = 6..12)

A project is linked to exactly one GitHub repository

Class Model


Visitor
Course
1
CourseSchedule
1
1
1
n
User
m
CourseProject
n
member
repo: URL;
Admin
DR

Core Functions

For a given project, a member

- Can send out stand-up emails
- Can enter their happiness (index value)
- Can review coding activities on GitHub

all scoped by the course schedule

2. Current State

Starting Mini Meco

Assuming the user role

1. Delete server/myDatabase.db
2. Start frontend and backend
3. Create new user via signup
4. Update status to confirmed using DB Browser
5. Logout, login (double-click needed)

Course Setup

Assuming the administrator role, on project admin screen

1. In project group list section
   a. Create new semester
   b. Create new course (= project group)
   c. Click create twice
2. In project lists section
   a. Enter course
   b. Create new project
   c. Click create twice

Joining a Project

Assuming the user role, under configuration

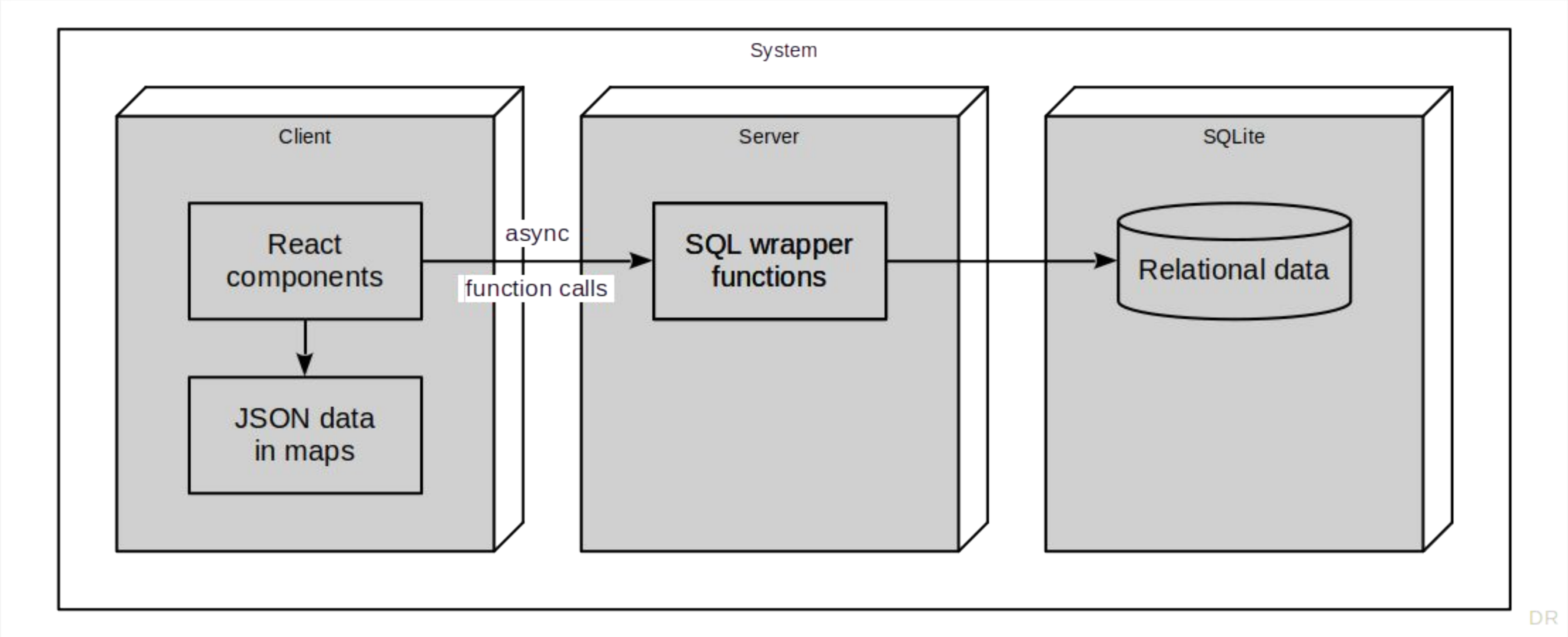
1. In the settings section
    a. Select a course
    b. Join a project by clicking on +
    c. Enter your role (you can invent something)
2. In the project config section (optional)
    a. Select a project that you are a member of
    b. Provide a GitHub repository address

Using Functions

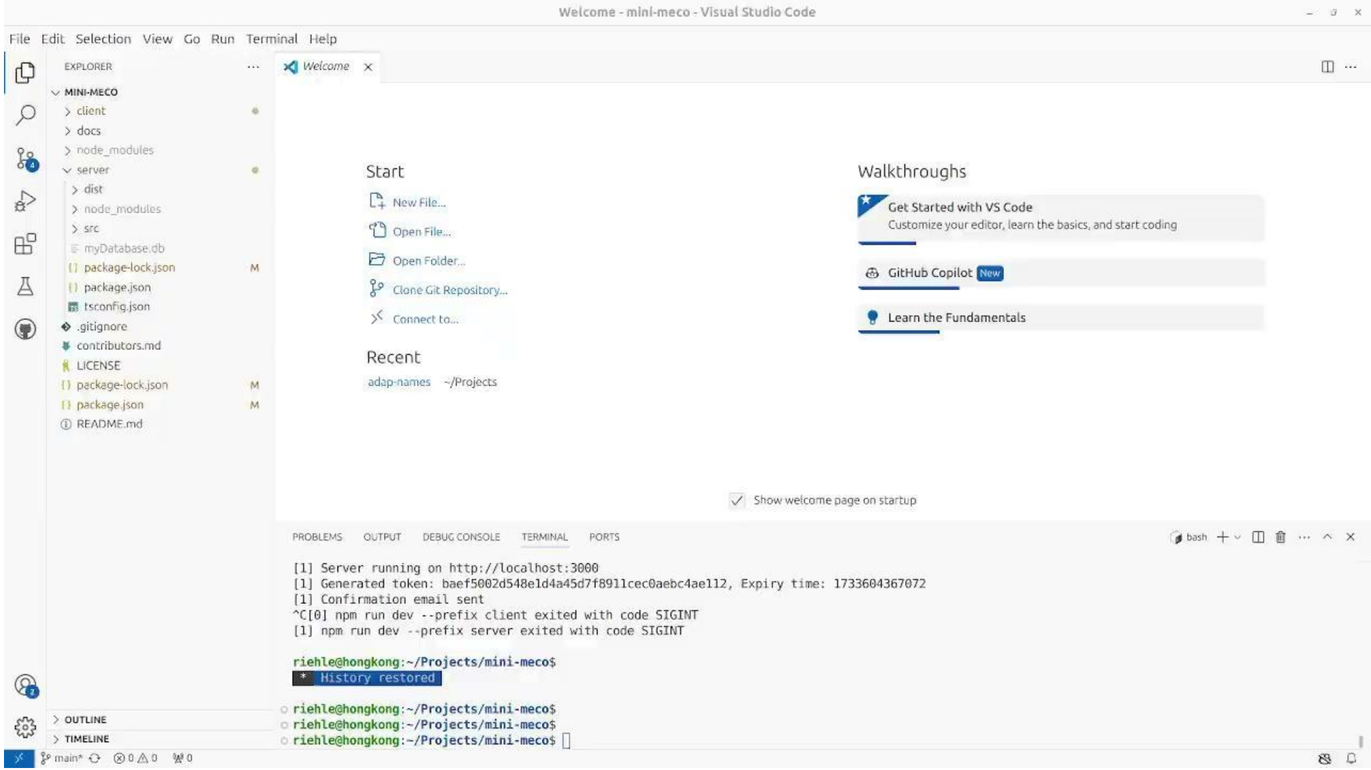
Assuming the user role

1. Select a project
   a. Write stand-ups
   b. Provide happiness
   c. Review code activity (not working)

Current Mini Meco Architecture



Video Demonstration



```
[1] Server running on http://localhost:3000
[1] Generated token: baef5002d548e1d4a45d7f8911cec0aebc4ae112, Expiry time: 1733604367072
[1] Confirmation email sent
^C[0] npm run dev --prefix client exited with code SIGINT
[1] npm run dev --prefix server exited with code SIGINT

riehle@hongkong:~/Projects/mini-meco$
 *  History restored

riehle@hongkong:~/Projects/mini-meco$
riehle@hongkong:~/Projects/mini-meco$
riehle@hongkong:~/Projects/mini-meco$
```

[1] https://drive.google.com/file/d/12oZK1FjUqV5--e3zzclMKsKecgO9_Tc_/view?usp=drive_link

3. Goal State

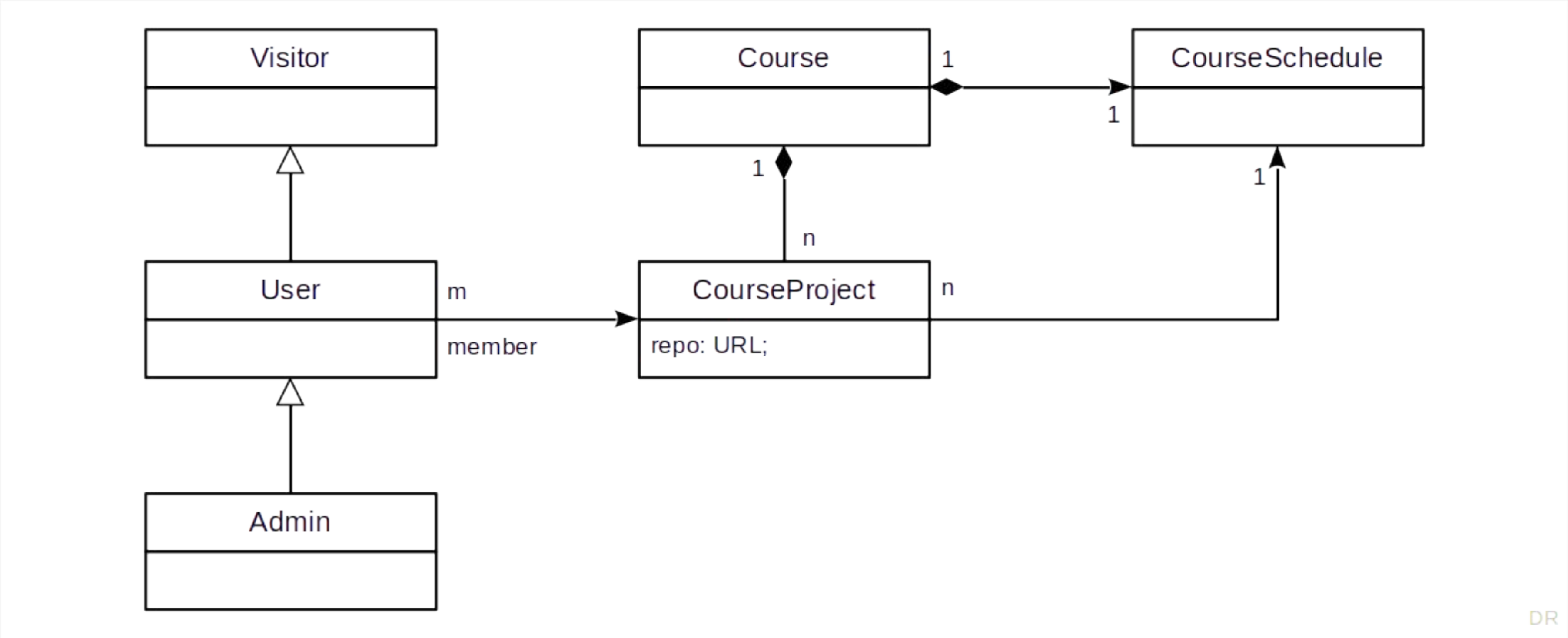
Project Mission

Learn how to refactor an application in need of improving

Goal State Overview

1. Create domain model
   a. Use class model from before
   b. Introduce proper value types
2. Fix user interface (still React)
   a. Fix logical structure of UI
   b. Connect to domain model
3. Map to database (still SQLite)
   a. Fix database schema
   b. Use serializer pattern

Class Model (Recap)



(Potential) Value Types

User name, password

User life-cycle status (probably enums)

Access rights

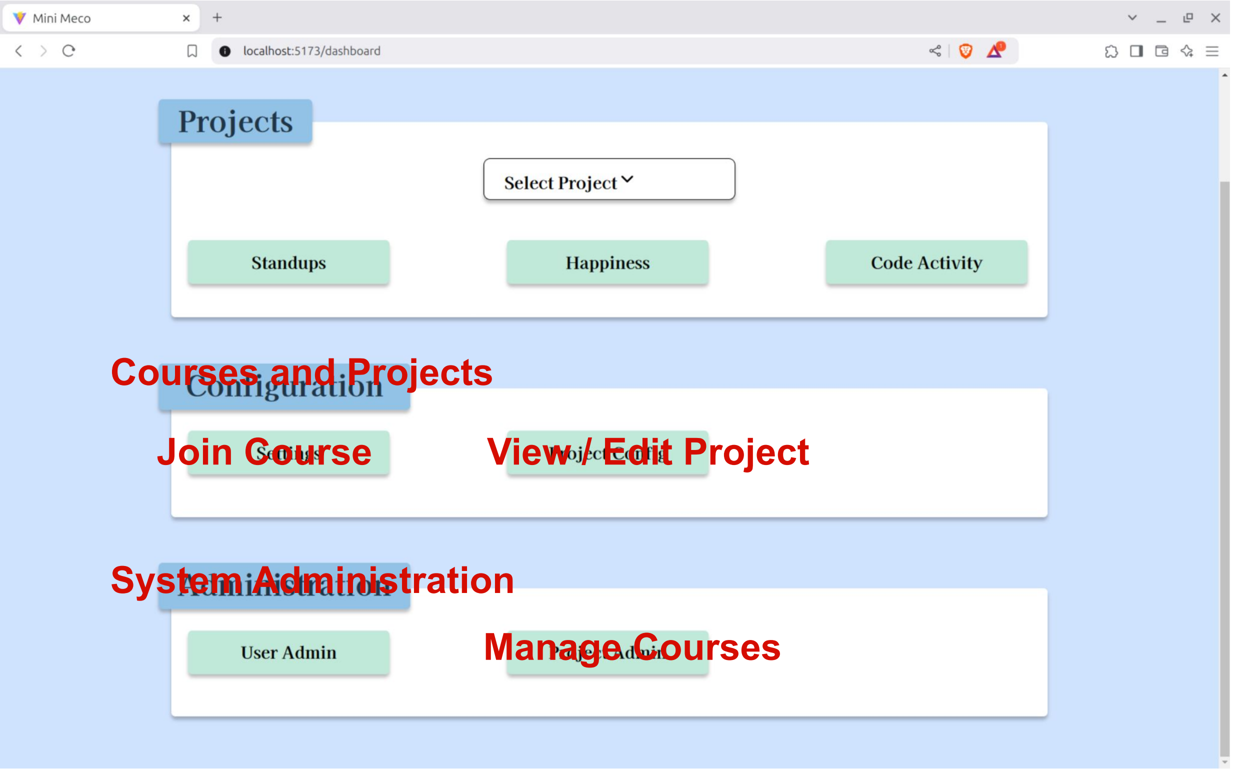
Happiness value (-3..0..3)

Timestamp, time, date, week, calendar year, semester, academic year

Commit

URL

Dashboard



Courses and Projects

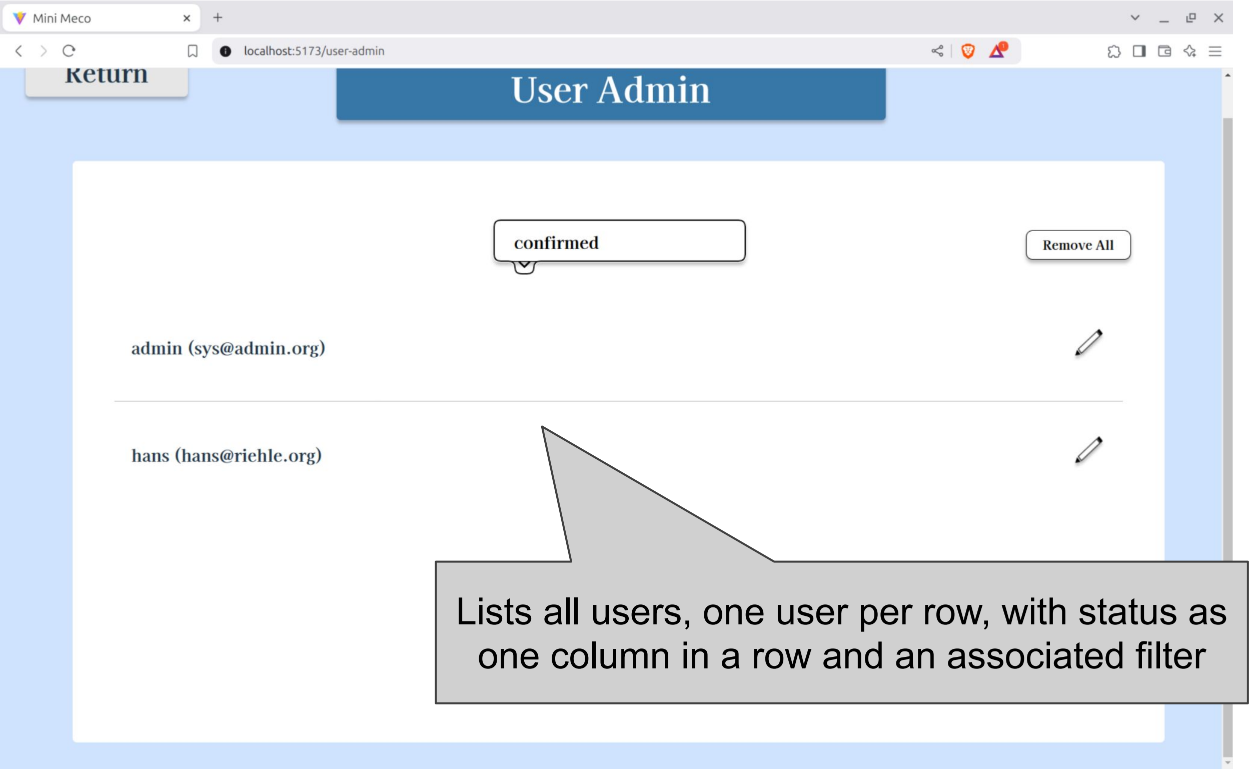
Join Course

View / Edit Project

System Administration

Manage Courses

Admin: User Admin



admin (sys@admin.org)

hans (hans@riehle.org)

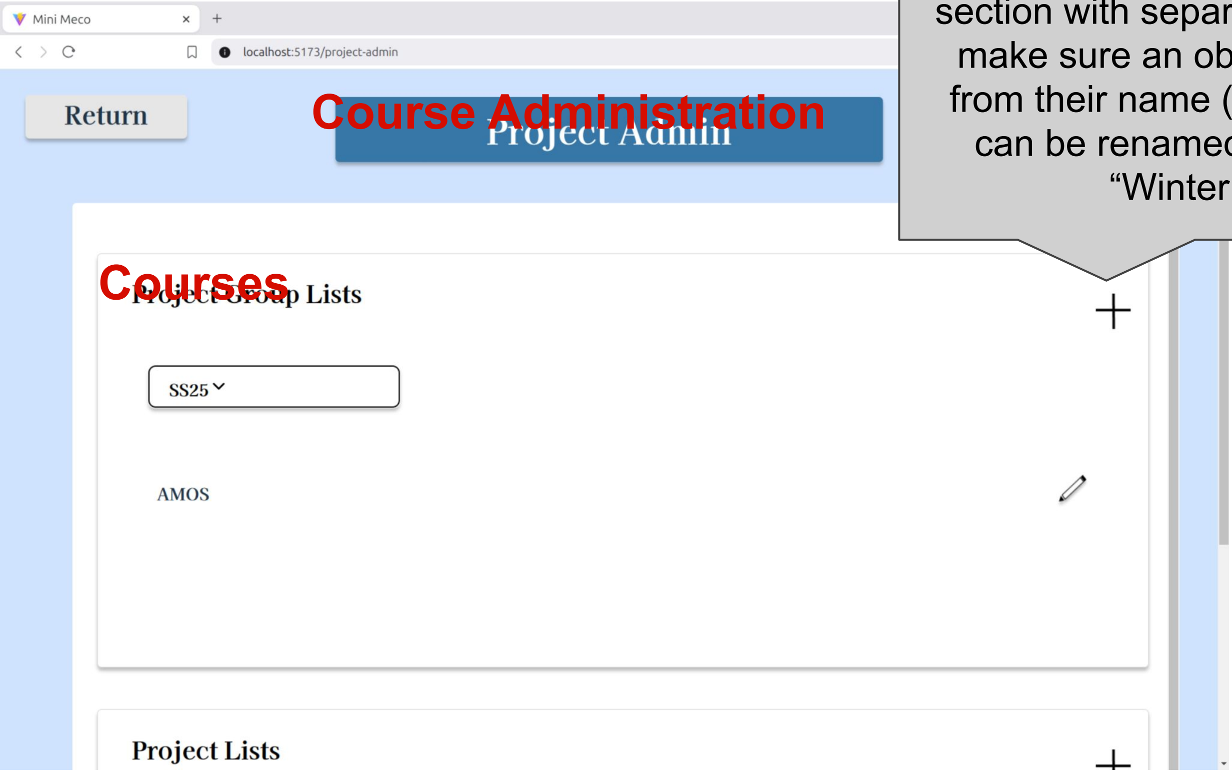
Lists all users, one user per row, with status as one column in a row and an associated filter

Logic of the Course Administration Screen

Three sections: Semester (top) → Course (middle) → Project (bottom)

Each section above provides the context for the section below

Admin: Project Admin 1

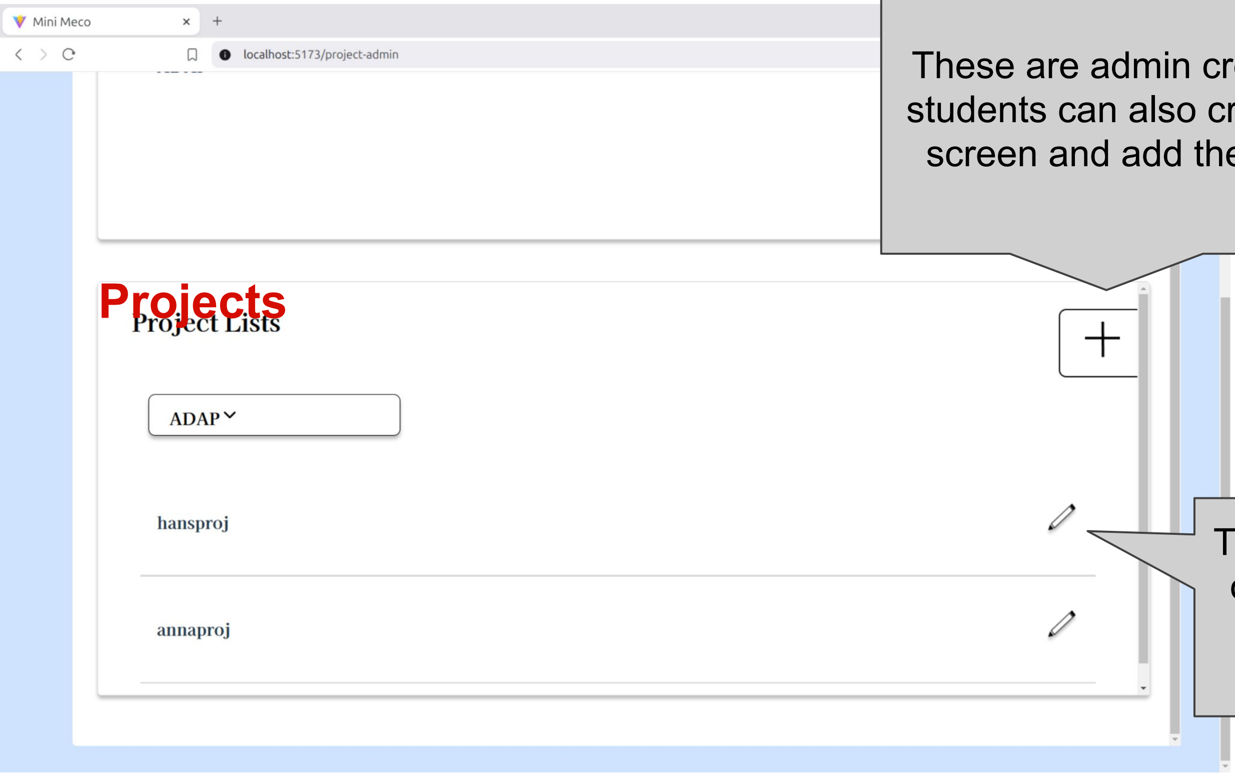


Course Administration

Courses

Split into semester section and course section with separate CRUD functions; make sure an object’s id is separate from their name (and that the objects can be renamed i.e. “WS24/25” to “Winter 2024/25”)

Admin: Project Admin 2



Projects

Project Lists

ADAP

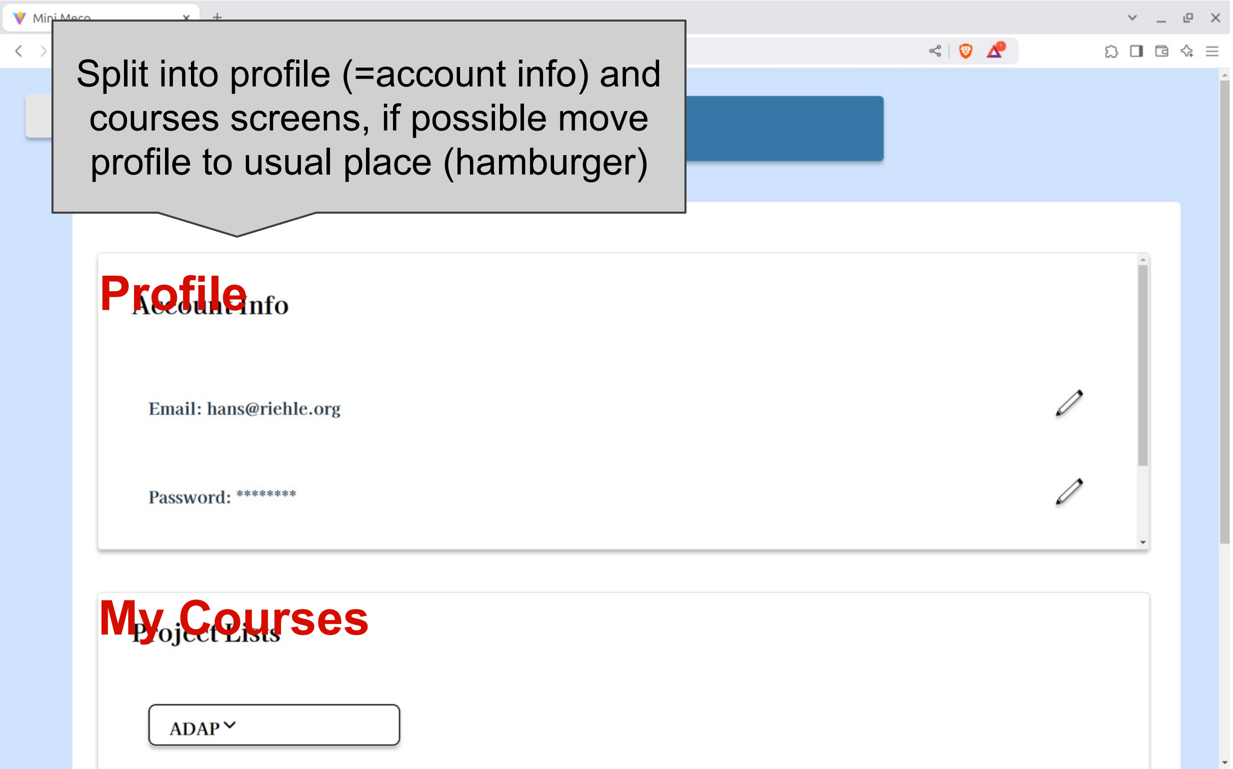
hansproj

annaproj

These are admin created projects (AMOS); students can also create projects in another screen and add them to a course (ADAP)

The edit dialog should allow editing of all project fields; however, only owners can edit, others can only join and view

User: Settings



Split into profile (=account info) and courses screens, if possible move profile to usual place (hamburger)

Profile

Account Info

Email: hans@riehle.org

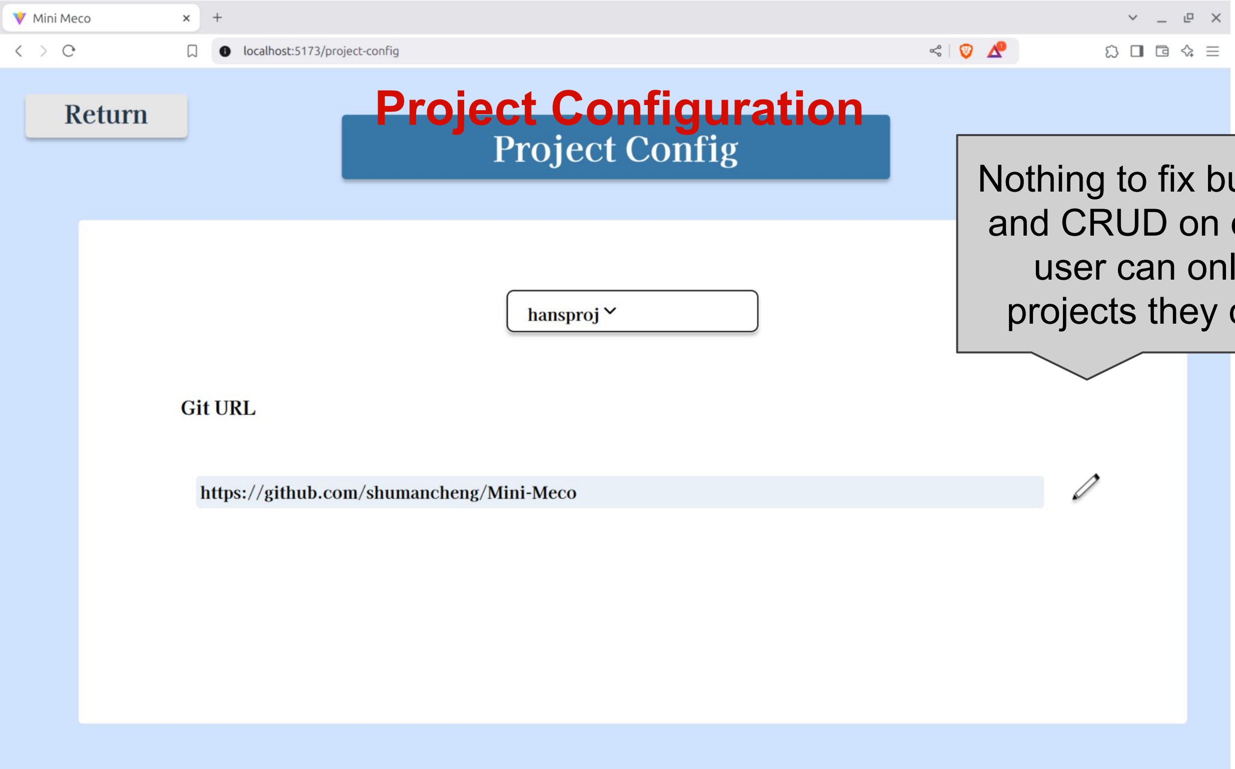
Password: ********

My Courses

Project Lists

ADAP

User: Project Config

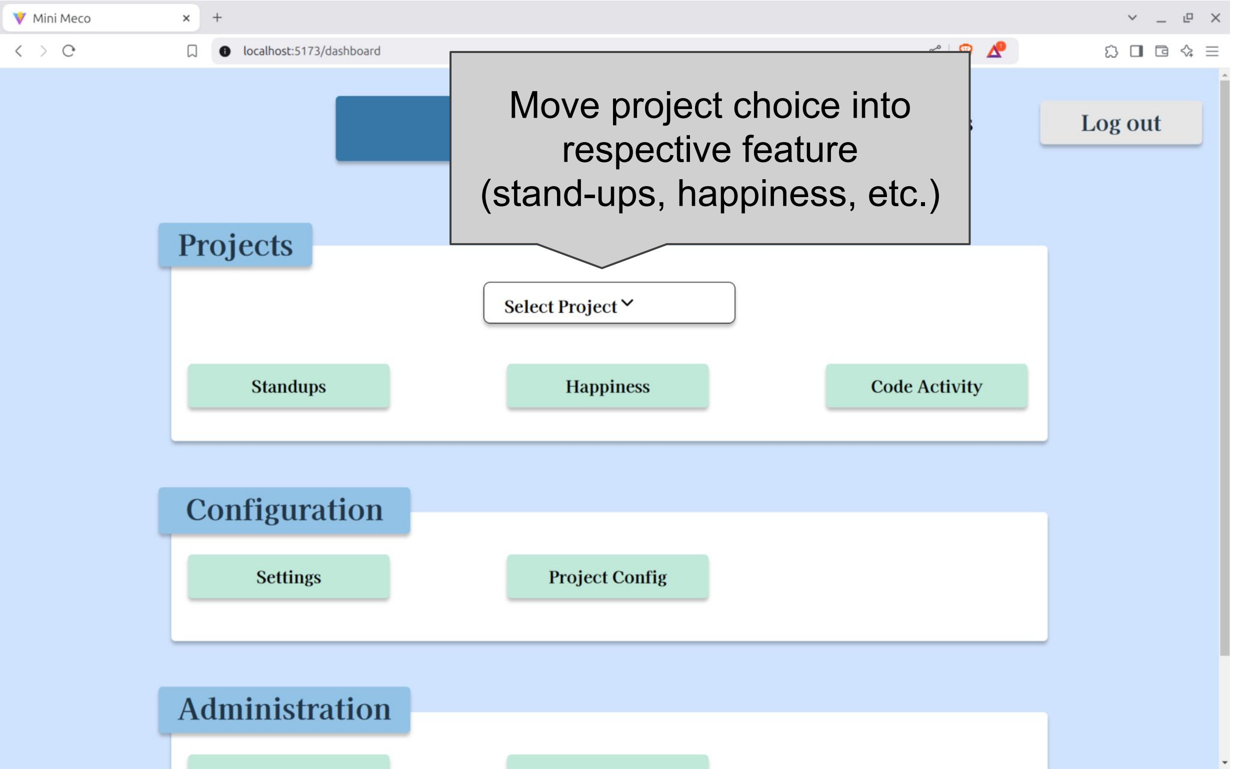


Git URL

https://github.com/shumancheng/Mini-Meco

Nothing to fix but visuals and CRUD on object; a user can only edit projects they created

User: Dashboard



Move project choice into respective feature (stand-ups, happiness, etc.)

4. Optional Homework

Mini Meco Extravaganza Homework is Optional

You will not be penalized if you don’t participate

You’ll get extra credit if you participate

Extra credit might lift your grade if you are at a grade boundary

I hope it will be fun; fun as in horror movies can be fun

Or, view this experience as an idea of your first industry job

Mini Meco Extravaganza Timeline

Week	Dates	Topics
9	Jan-13 to Jan-20	UI fixes and improvements
10	Jan-20 to Jan-27	Domain model (classes)
11	Jan-27 to Feb-03	Value types introduction

Mini Meco Extravaganza Timeline

Think about your possible contributions until next week (Dec 16)

Let us know by regular class time if you'd like to contribute

Sign up here https://forms.gle/AD2Q7GT2K8QspcT37

We will assign features using a feature board in time

https://github.com/orgs/riehlegroup/projects/3

You can also grab features yourself

Thank you! Any questions?

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