

Practical course - Introduction to Process Mining with Implementation of a Webservice (IN0012)

Final Presentation

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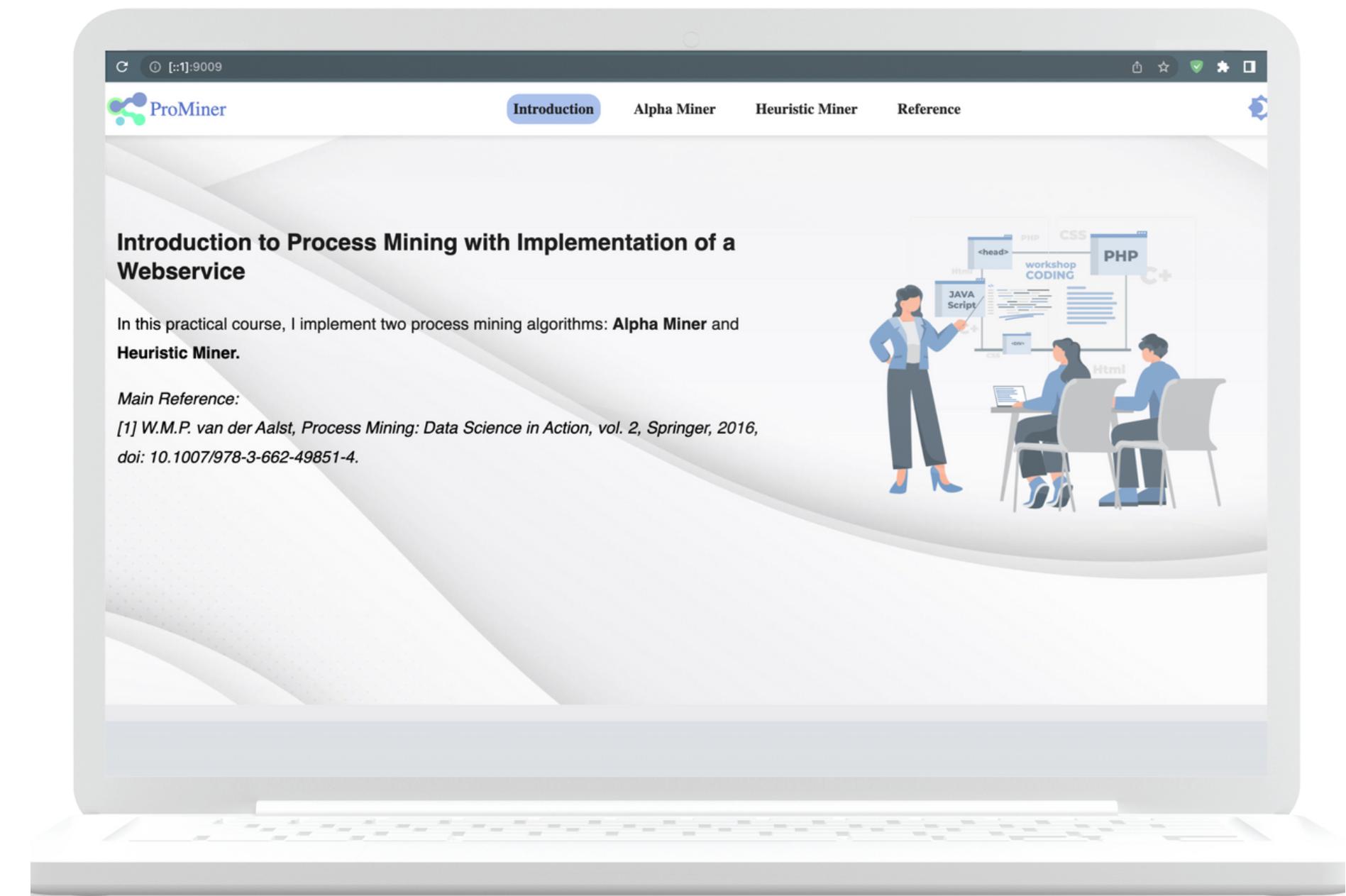
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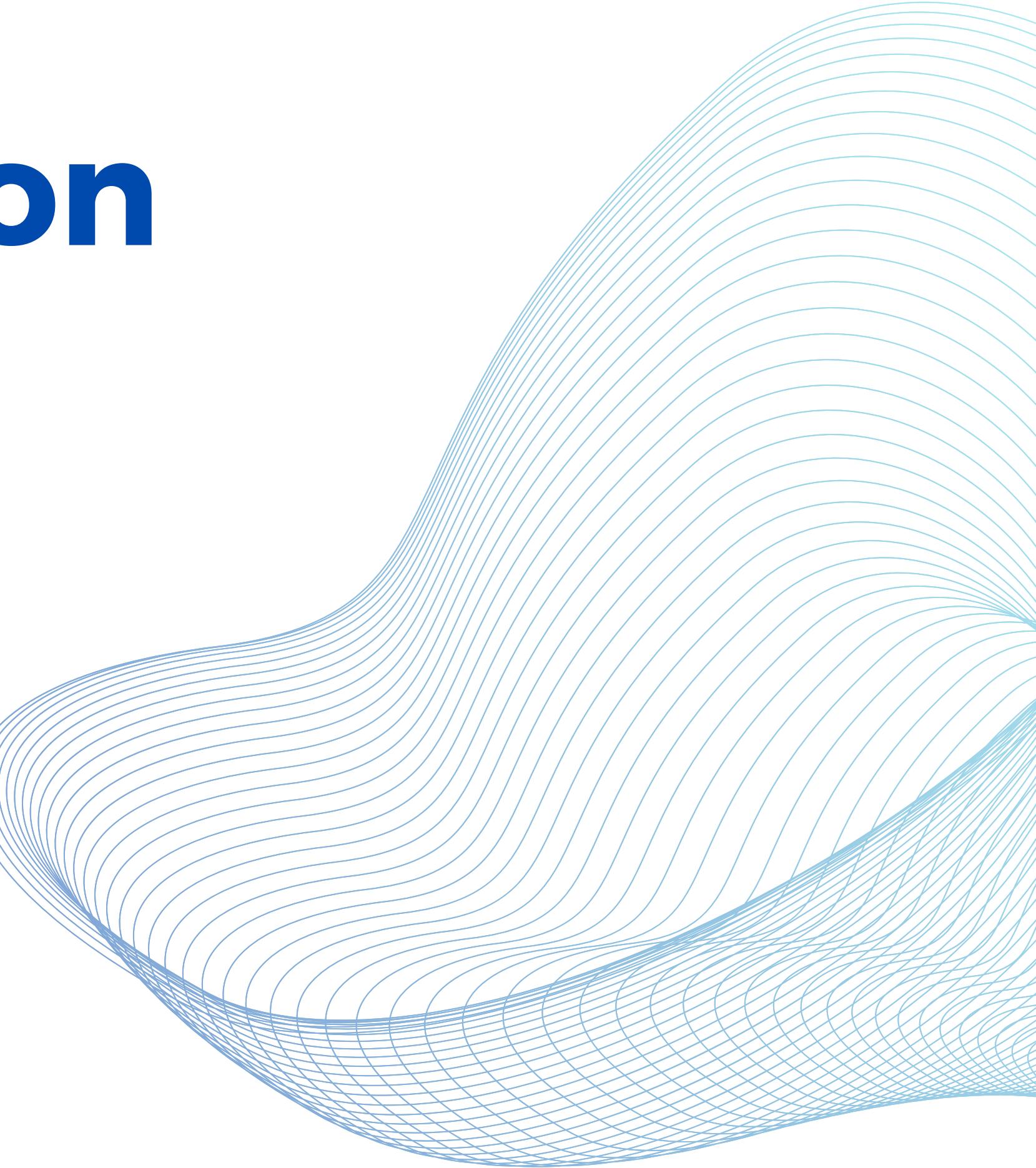
4. Live Demo



1. Implementation

Final results:

- Alpha Miner
- Heuristic Miner



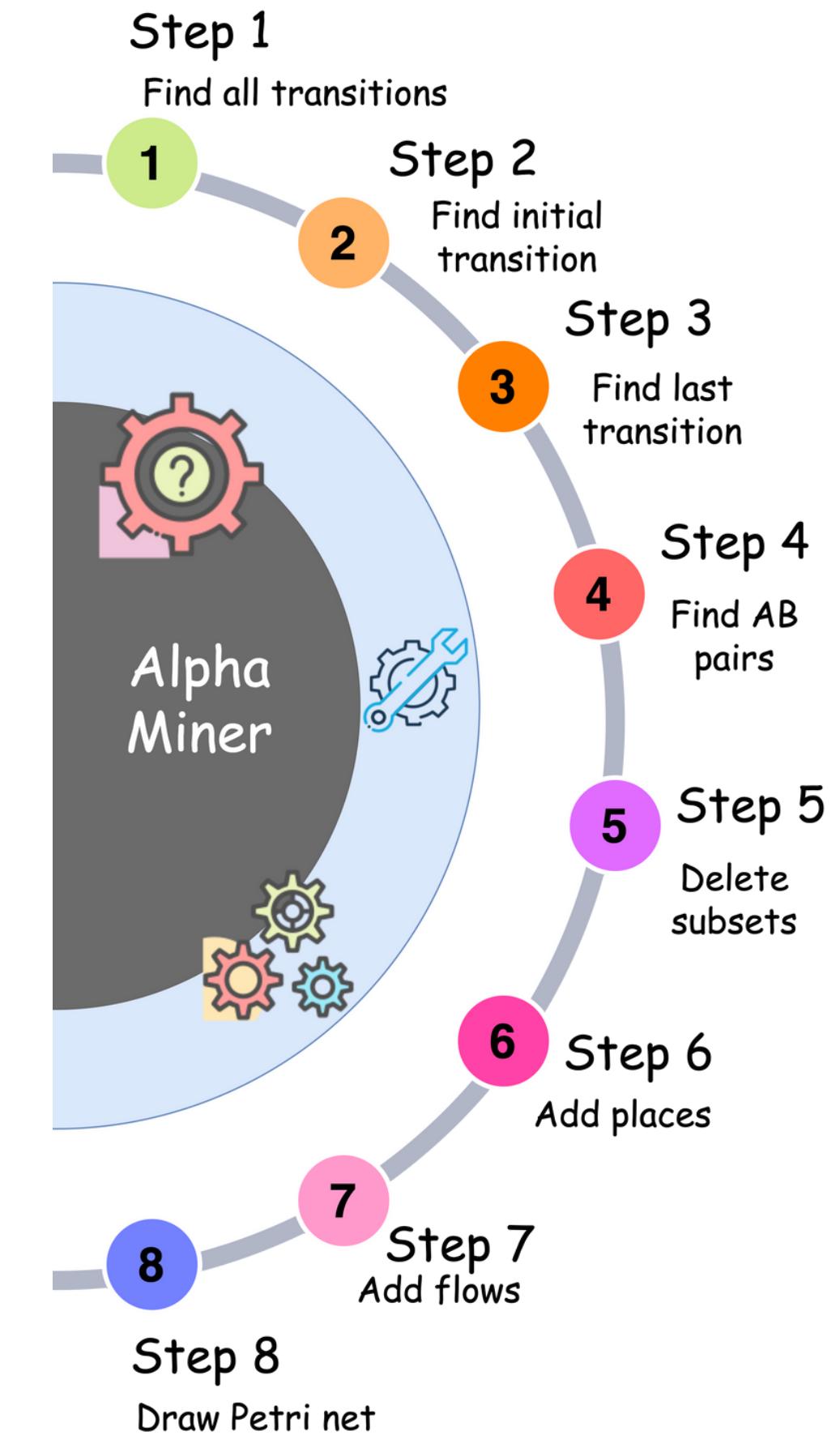
1. Implementation

Alpha Miner

- All 8 steps implemented
- Unit tests implemented for the first 5 steps

Additional:

- footprint matrix



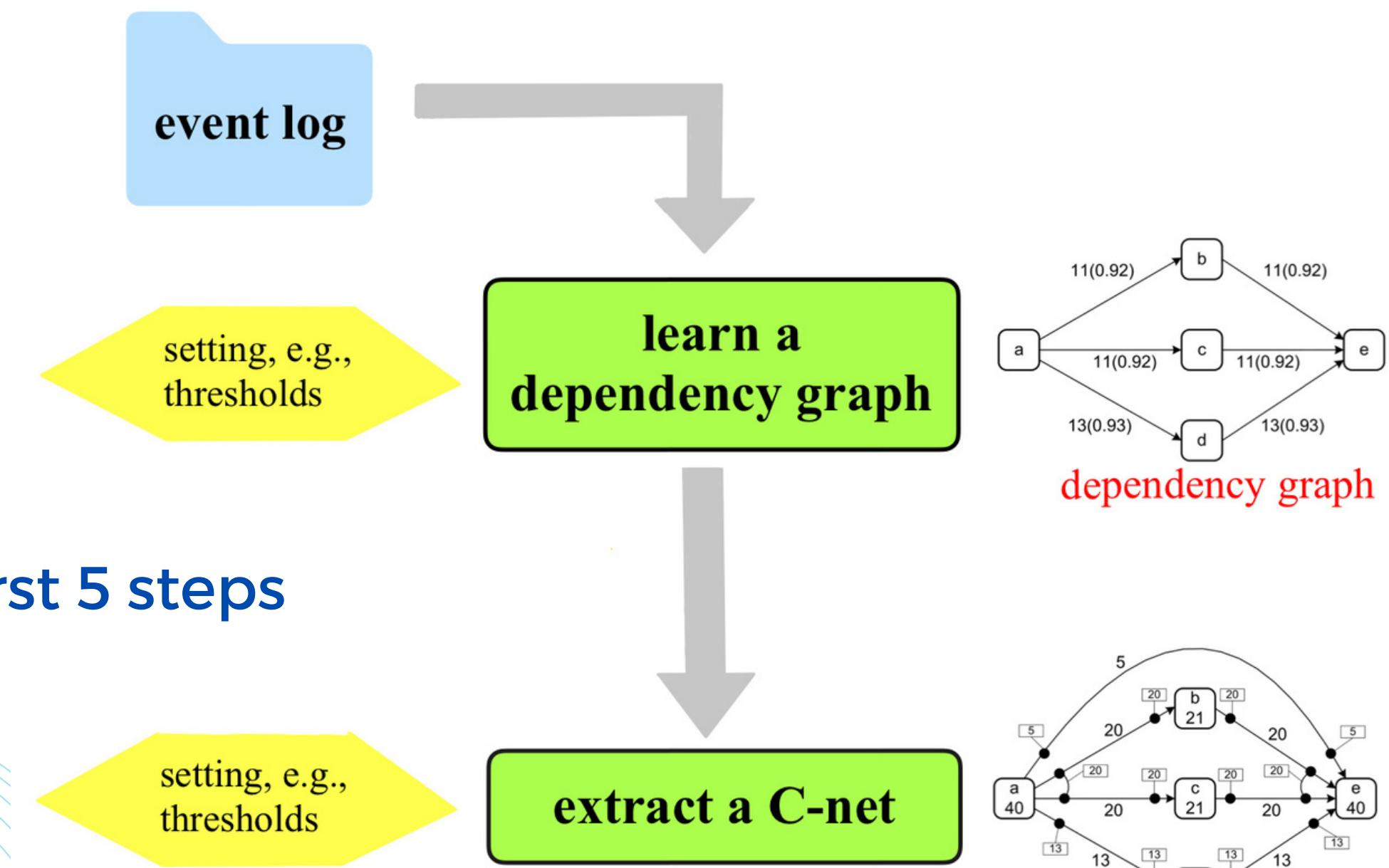
1. Implementation

Heuristic Miner

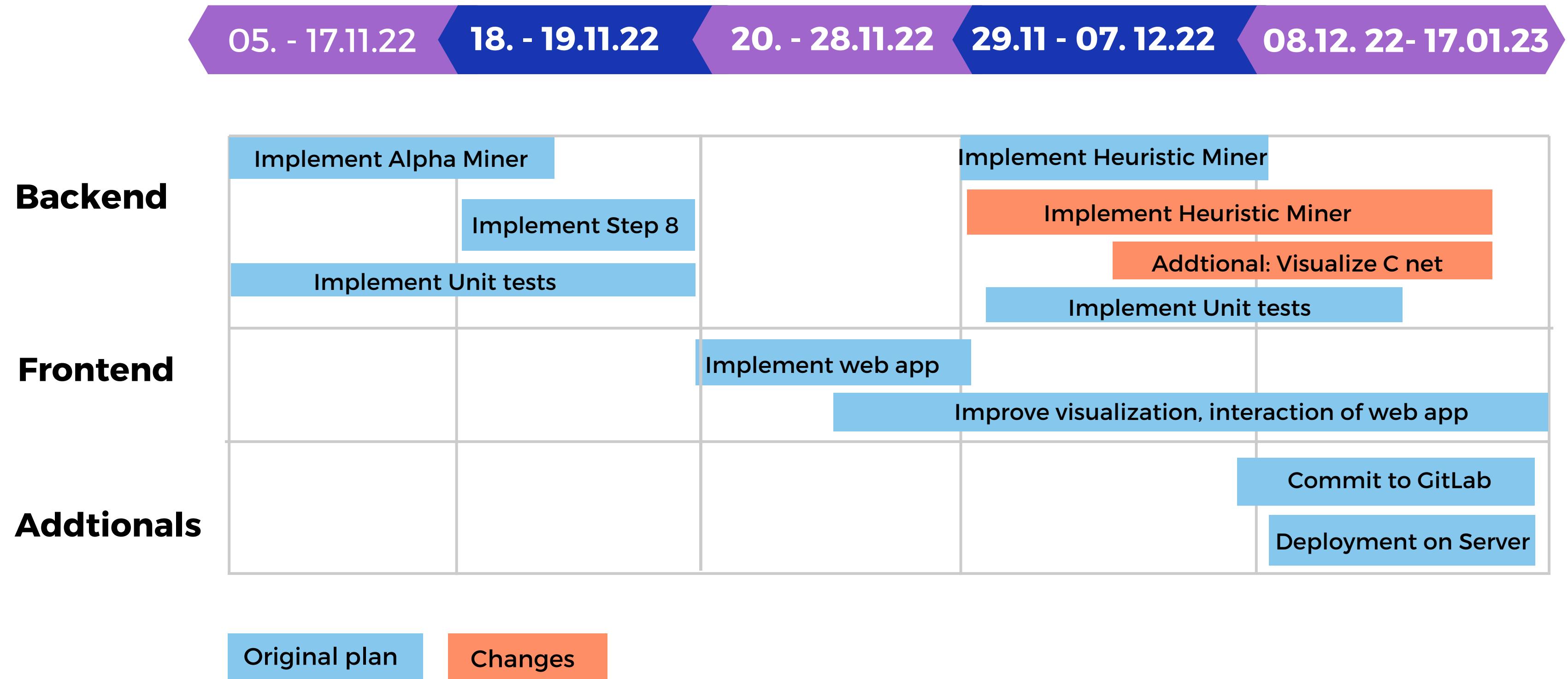
- Two phases implemented
 - Phase 1: draw dependency graph
 - Phase 2: draw Causal net
- Unit tests implemented for the first 5 steps

Additional:

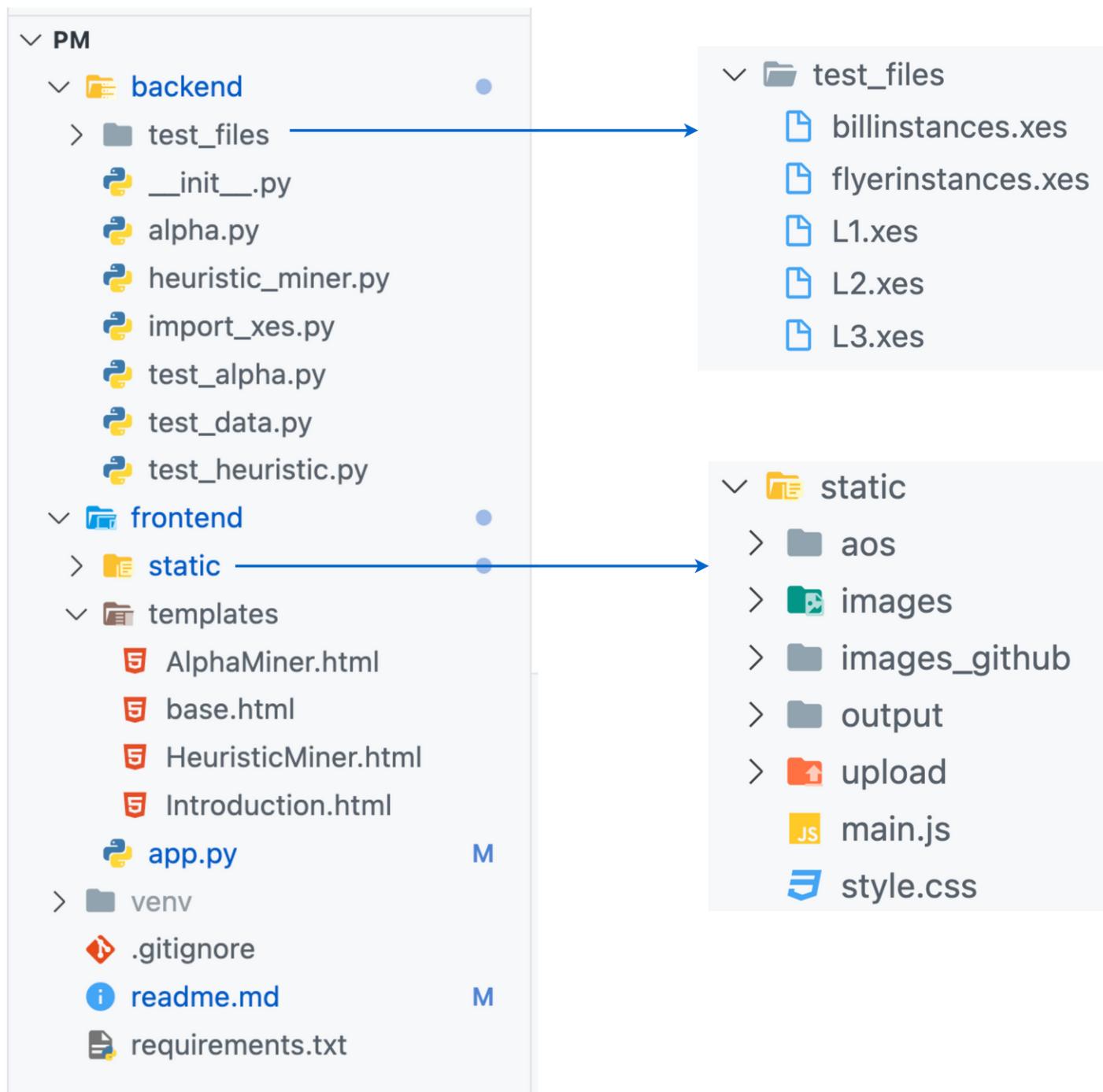
- dependency measure matrix



1. Implementation Timeline



2. Folder Structure



Backend:

- source codes
- tests and test files

Frontend:

- static files
- html templates
- main application

Others

- requirements.txt
- readme.md
- .gitignore

3. Challenges & Solutions

I faced quite some challenges, there are the biggest ones:

Challenge 01

C net difficult to visualize

Reason: Graphviz doesn't support adding
input / output binding

Solution

Treat binding nodes as normal nodes and label them
as e.g. a-bi, a-bo on the arc of (a,b). And then add edge
between for (a-bi, a-bo). Please refer more info in the
source code.

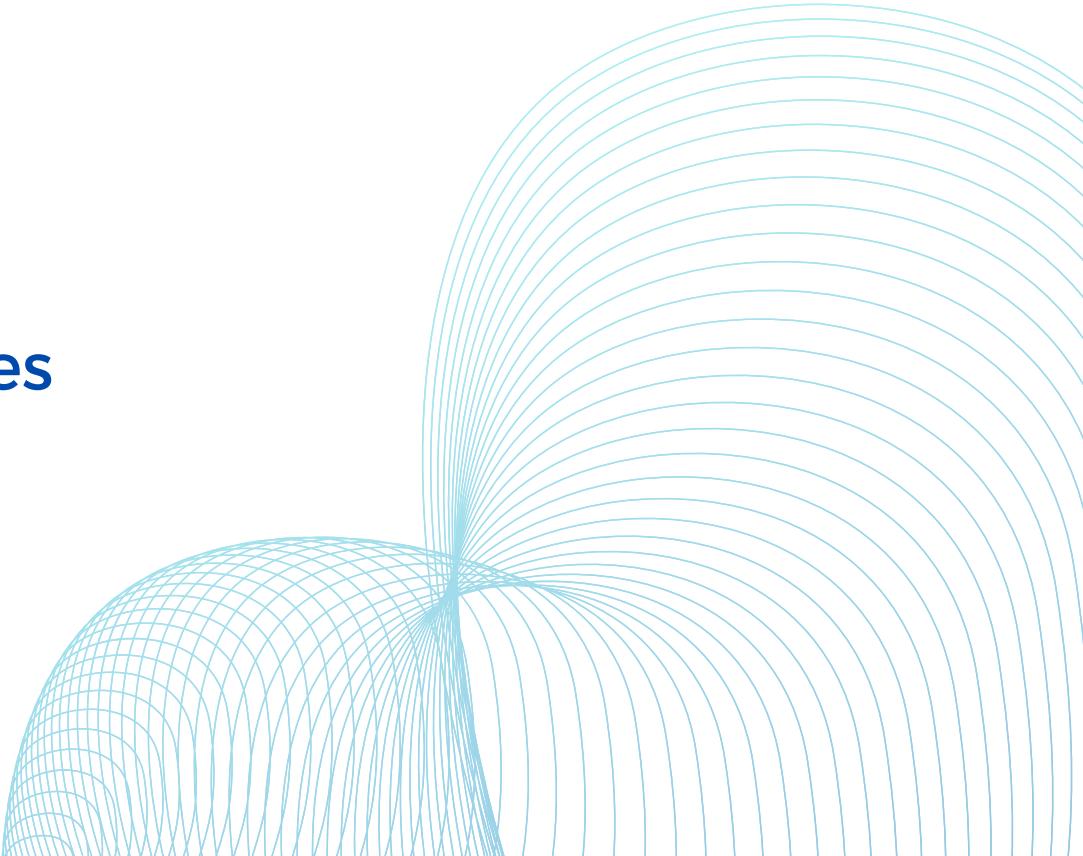
Challenge 02

Web app not working on server

Reason: <ports/port number> not add
automatically before routes

Solution

Add ports/9009// to my routes



4. Live Demo

I will first show you how to run my Flask app locally. Then I will show you how to run it on the Lehre server.

-  **1 Quick tour to readme.md**
-  **2 Run the app locally and remotely**
-  **3 Some additional functionalities**

