
Redefining a web application for the Robotics Foundations course

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Why and aims of the Project

Robot Operating System is officially support by Ubuntu.

- Some students were unfamiliar with unix platforms

Robotics Foundations Virtual Machine:

- High system requirements (4 core CPU, 16GB RAM)
- Unsaved progress will be lost if RFVM undergo updates

The Robotics Foundation Web Application aims to be a platform which:

- Reduce the cognitive load by minimising set up steps
- Provide students with the necessary materials and tools to complete lab exercises
- Work anywhere

How was it implemented?

Django

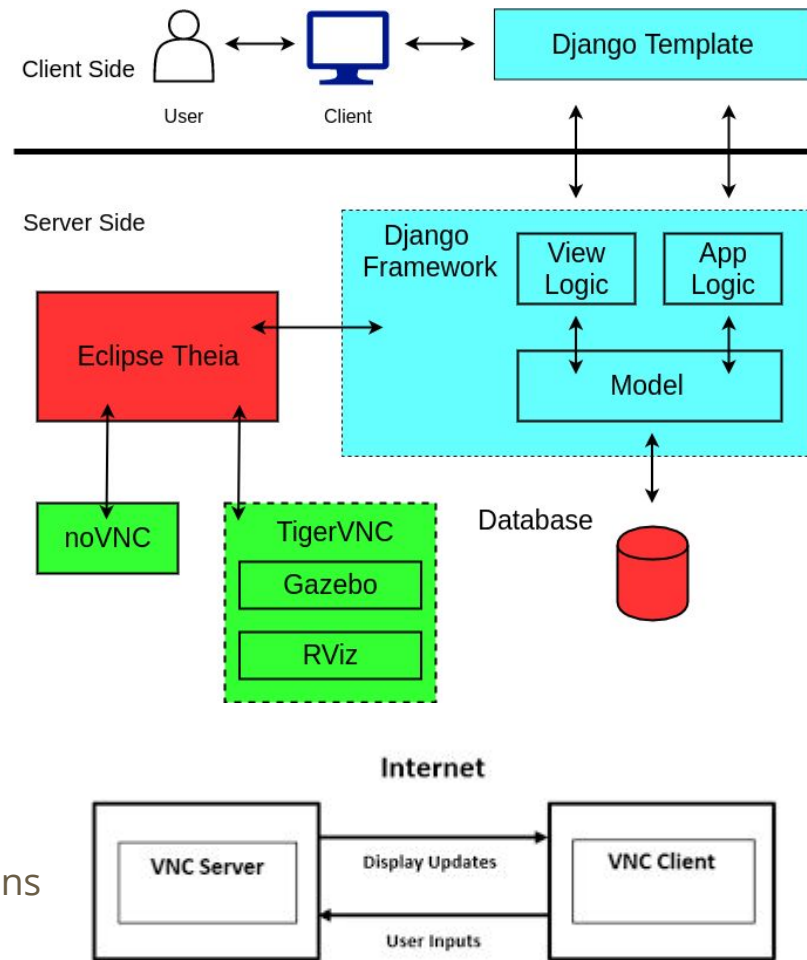
- A batteries included web development framework
- Past experience

Eclipse Theia

- An IDE framework which emphasises extensibility
- Imported VS code extensions as plugins
- Provided Jupyter Notebook support

TigerVNC & noVNC

- A VNC server and client for viewing robot visualisations



End Product

