

Capstone II

Classification of Lung Diseases using X-Rays

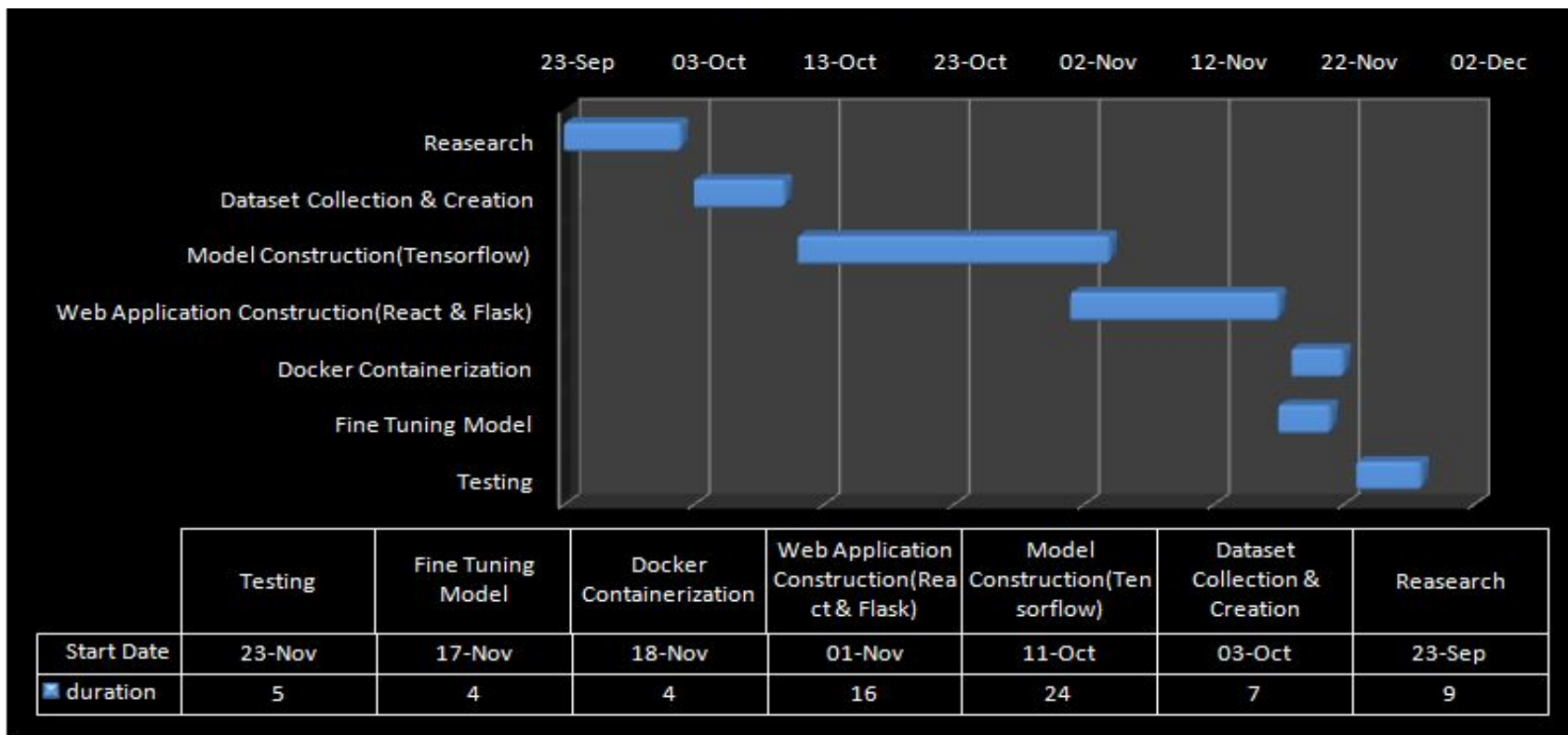
Team Members

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Scope of the Project (Recap)

- **Project Aim:**
 - To build a classification model that can classify between various lung diseases such as pneumonia, covid-19 and typhoid.
 - To build an application that can take images as input and give predictions as output based on our model
 - To employ tools such as docker, jenkins email, pyb, pyunit and selenium for deployment and testing
- **Deliverable:** Docker containerized flask application, with a frontend that can take a picture or a series of pictures (x-rays) as an input to predict category of lung disease and confidence score for said images.

Timeline



Model

- Transfer learning
- Custom model
- Comparison, Better results
- Creation of module
- Takes image as input and outputs prediction

Backend

- Web-app built in flask
- Single or multiple images
- Short Info about diseases
- Unit testing
- Selenium testing
- Pybuilder
- Jenkins email

Frontend

- Clean UI keeping in mind medical application
- Bootstrap
- Navigation and interaction with backend

Demonstration
