**BYUI Hackathon Proposal**

**Title:**

People Tracking Prototype

**Team Name:**

Team 41

**Members:**

Seth Chen (Resnet-50 model, Flask), Simon Sung (Frontend, Firebase)

**Problem statement:**

Our goal is to provide a solution to gym and I-center at BYUI where they need to know how many people in and out there are daily. This solution is not meant to be the final one that they would adapt to. The people problem only serves as an initiative of this project.

**Proposed Solution:**

Our prototype would consist of a web, a Flask app, Firebase, and an object detection model. In this prototype, the web would serve as an entry to the client to upload an image, which is then sent by a http request caught by the Flask app. The app will then store the image on Firebase, as well as call the object detection model to process the image. Finally, a description consists of object labels and their respective confidence scores will be sent back to the client. Below are our DFD and flow chart to help specify any unexplained details:

(Placeholder for design charts)

**Technology Stack:**

Frontend:

Placeholder

Database/Backend:

Placeholder

**AI/ML:**

[Detr-resnet-50 Model](https://huggingface.co/facebook/detr-resnet-50)