

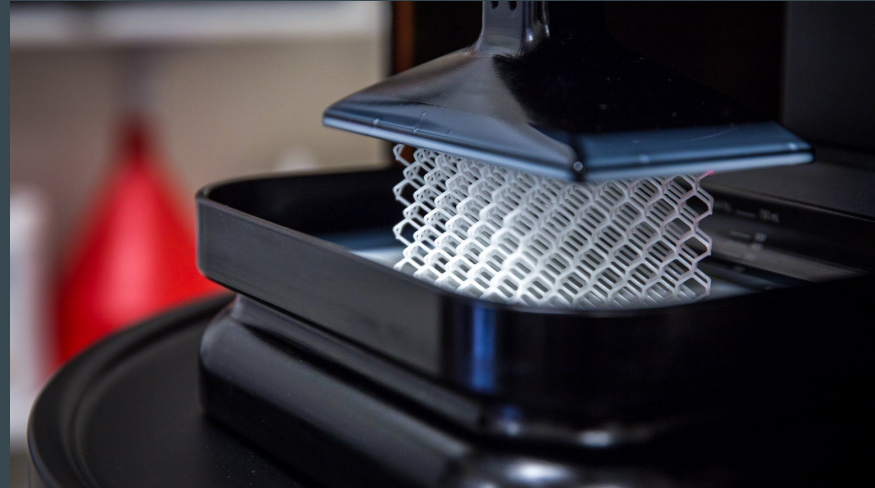
`print(d)`



Adam Tremonte, Andrew Thomas, Emily Huynh, Patrick Dixon

The Problem

- **3D printing is finicky**
 - Configuration
 - Slicing
 - Adjusting
- **Services like Octoprint only help so much**
- **Still many moving parts**
 - Model creation
 - Pre-processing
 - Slicing
 - Upload and printing



Our Scope

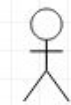
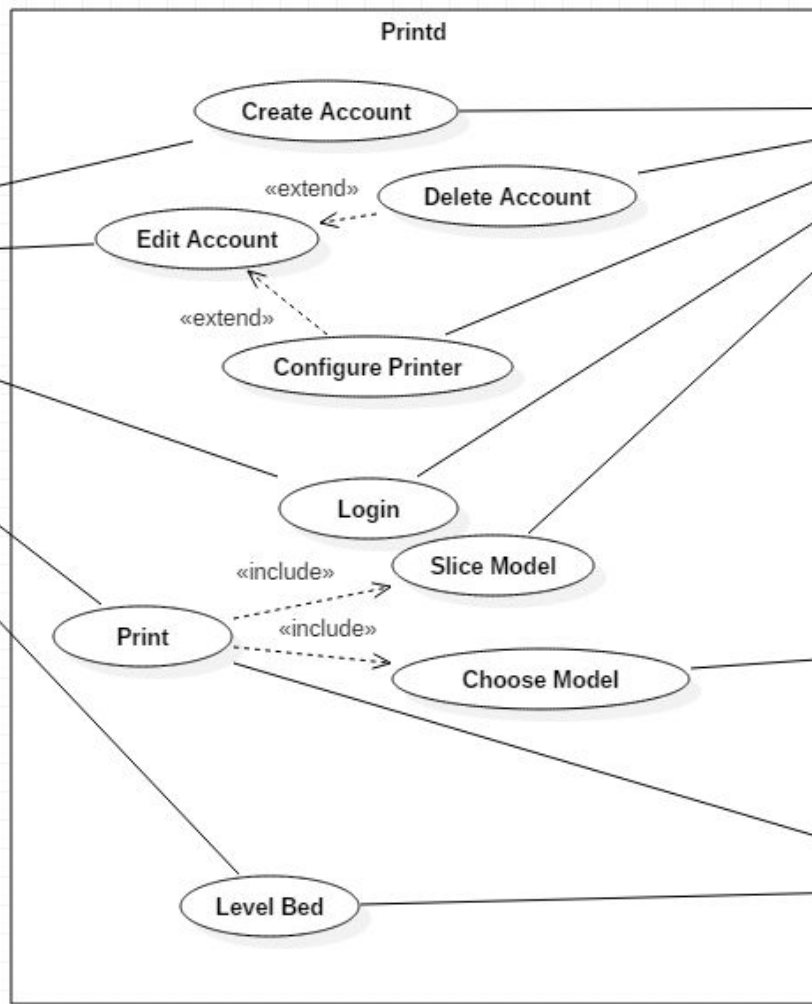
- Android application
 - Connects with:
 - Thingiverse
 - Octoprint
 - Slicer Server
 - Filament Tracking
 - Printer Configuration and Maintenance functionality



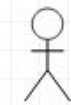
Use Cases



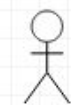
User



Server



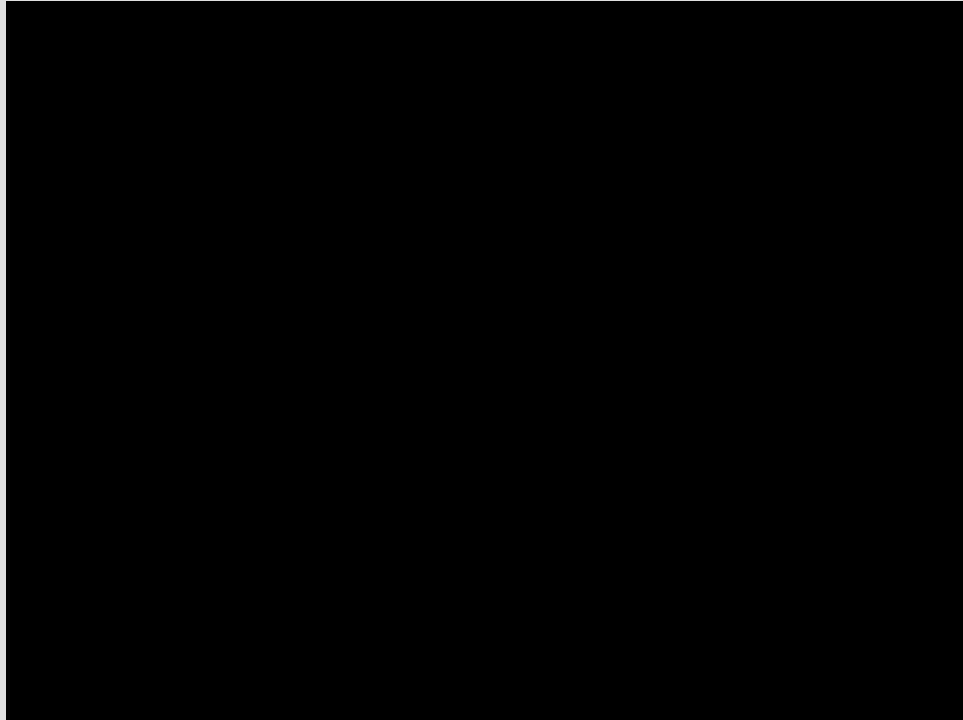
Thingiverse

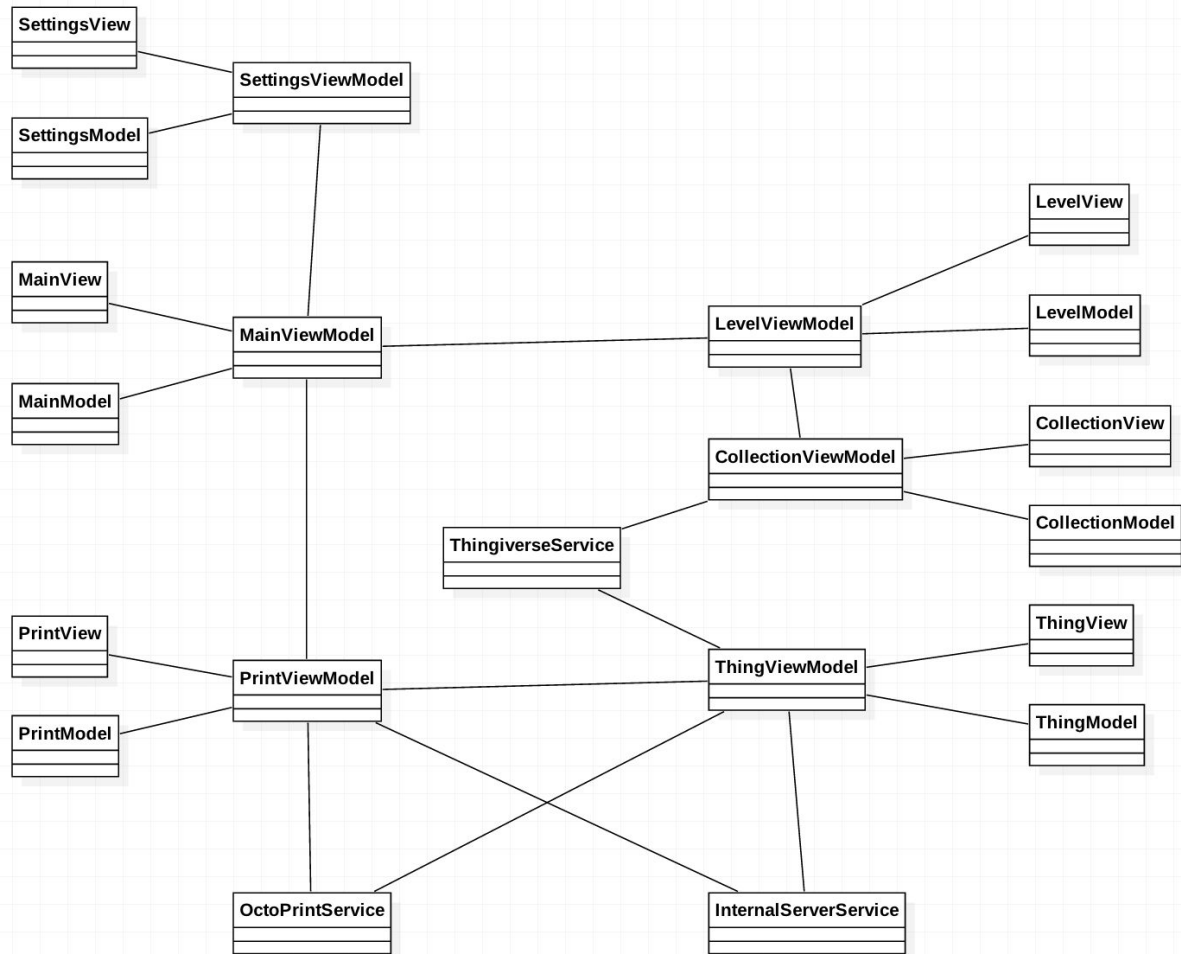


Octoprint

Class Diagram

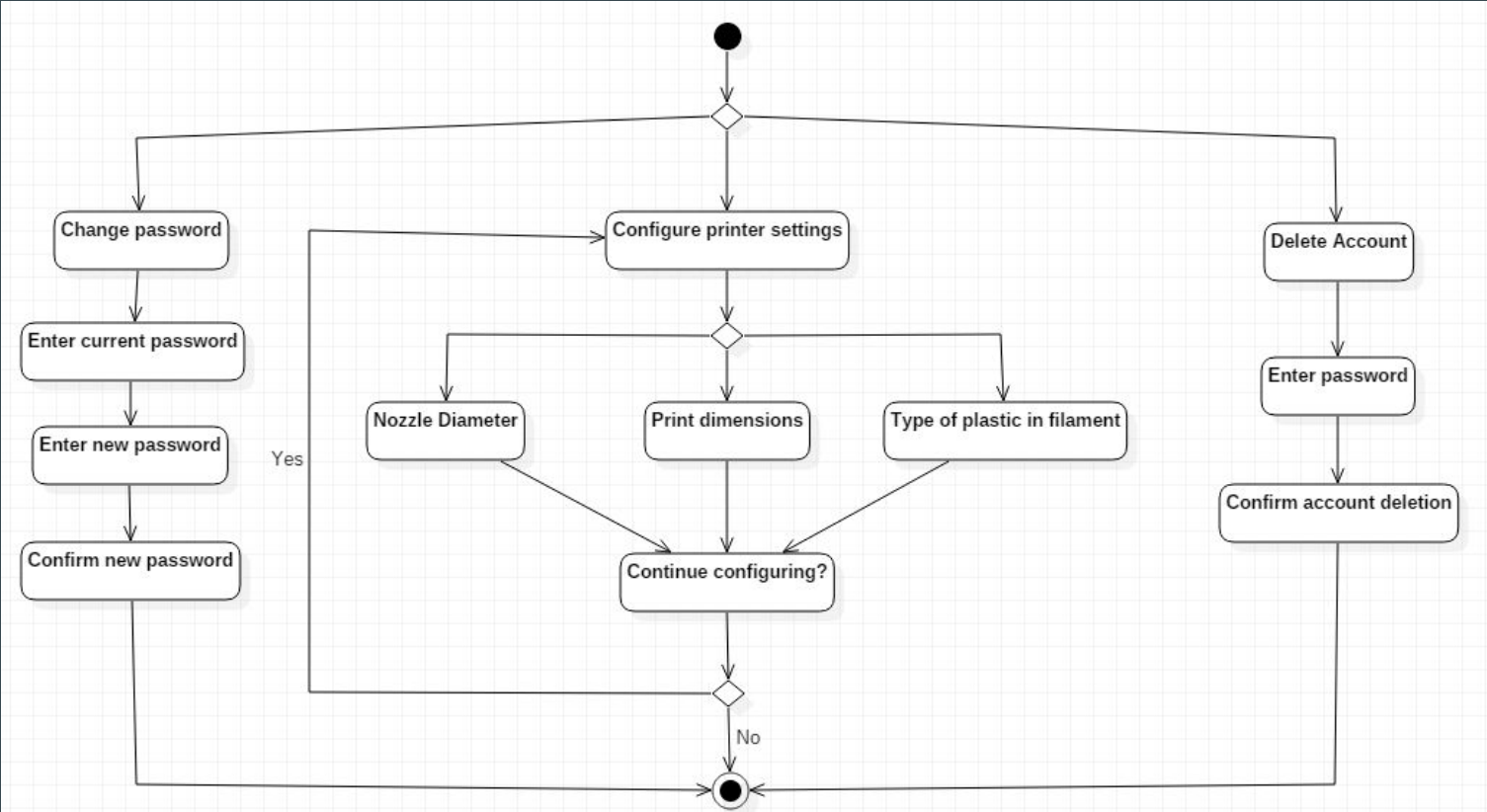
Interface Mockup



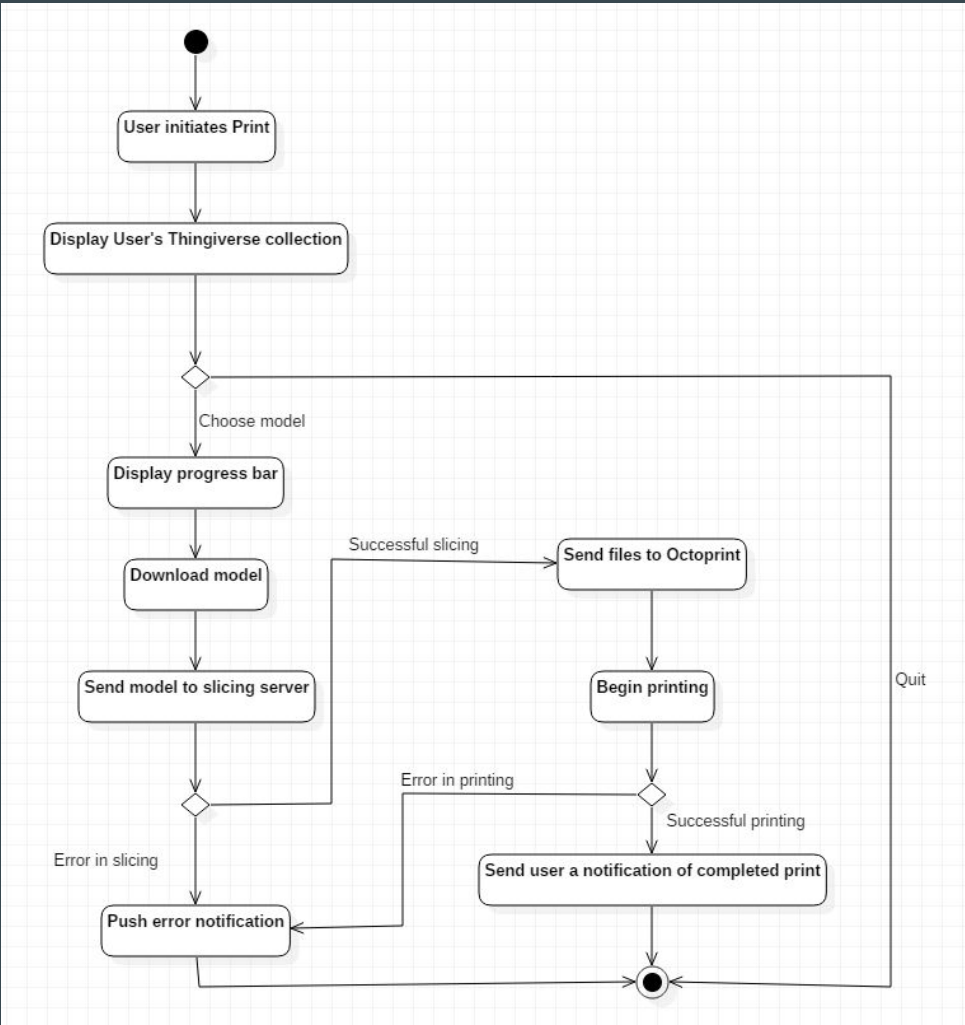


Activity Diagrams

Edit Account



Printing



Feature Priority

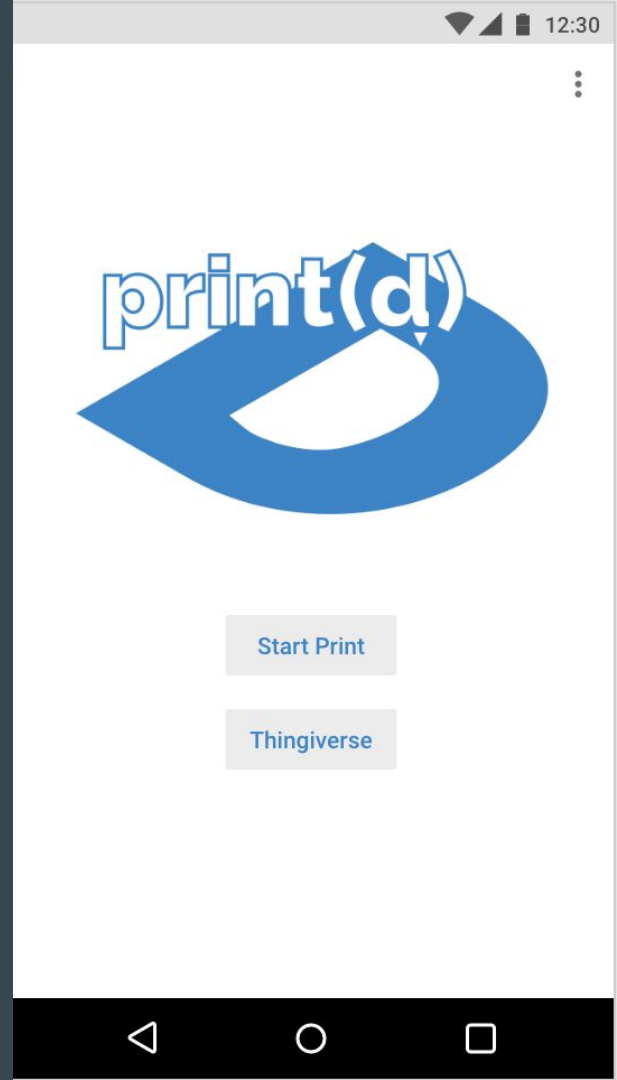
- Printing from Thingiverse - Required
- Custom Slicing Server - Required
- Assisted Bed Leveling - Possible
- Filament Tracking - Possible
- Thingiverse Browsing - Future Work

Potential Risks

- Fire
- API problems
 - ◆ Legal issues
- Printer communication

Our Perspective

- Lots of moving parts in this project
- Needed system in the community
- Could be more complex than anticipated
- Only Andrew has a 3D printer



Thanks!

Questions?