BookBarter

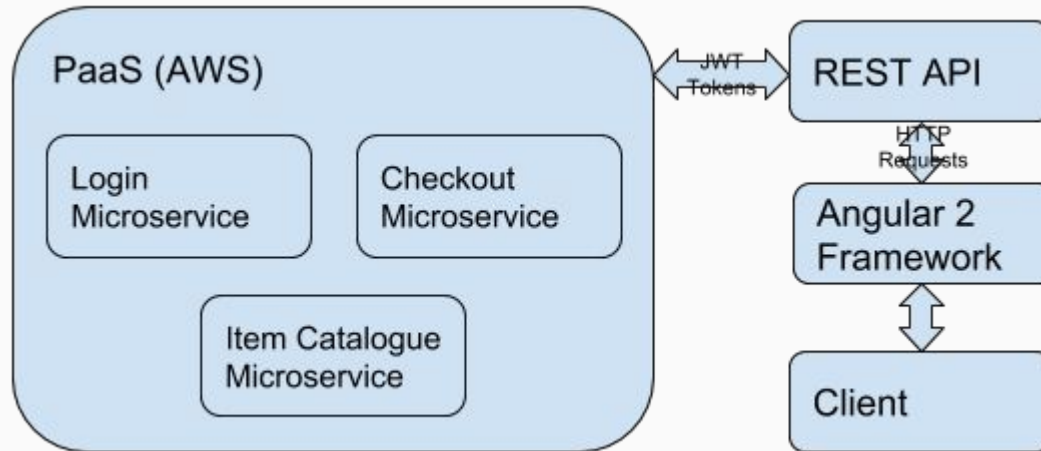By James Ridey, Bryce Altman, Brad Thurlow

Introduction and Background

- The Problem
  - Students do not want to pay full price for brand new textbooks
  - There is not one central place for them to purchase second hand textbooks
- The Solution
  - Retail Saas Application
  - Easy to use application that connects students together to buy/sell textbooks
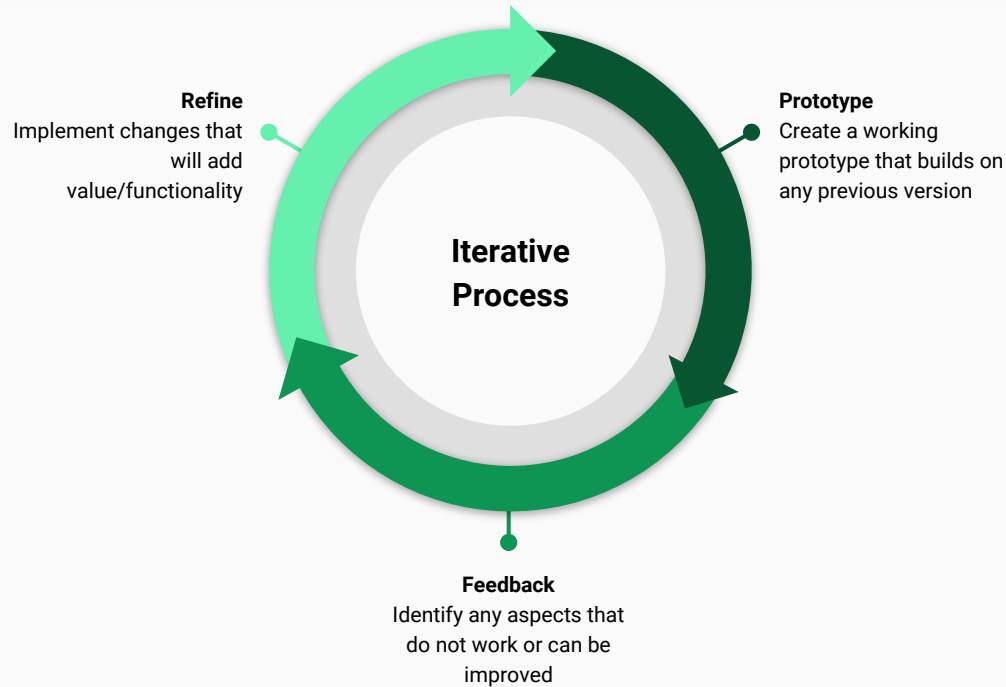 - Scalable from a simple to complex solution

Aim

- Connecting people
  - Who need textbooks
  - With those who have textbooks
- Microservices based architecture
  - Communicate to each other with Message Queues
  - Authentication with JWT tokens
  - Publicly accessible API with REST

Project Solution

Project Methodology
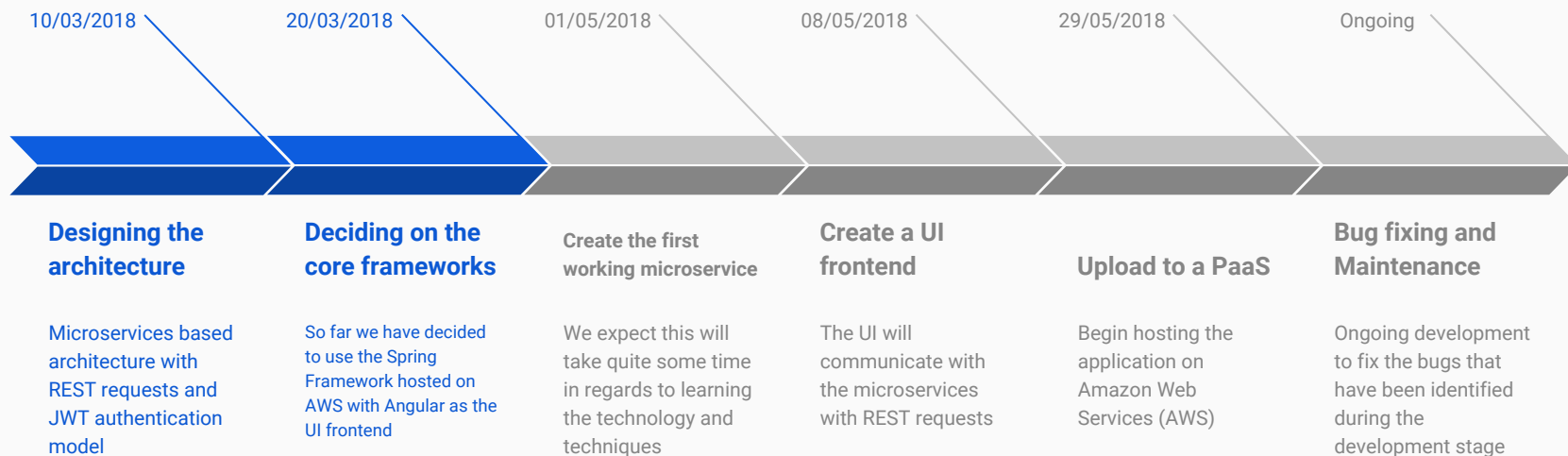

Refine
Implement changes that will add value/functionality

Prototype
Create a working prototype that builds on any previous version

Iterative Process

Feedback
Identify any aspects that do not work or can be improved

Timeline - Milestones

10/03/2018

20/03/2018

01/05/2018

08/05/2018

29/05/2018

Ongoing

Designing the architecture

Microservices based architecture with REST requests and JWT authentication model

Deciding on the core frameworks

So far we have decided to use the Spring Framework hosted on AWS with Angular as the UI frontend

Create the first working microservice

We expect this will take quite some time in regards to learning the technology and techniques

Create a UI frontend

The UI will communicate with the microservices with REST requests

Upload to a PaaS

Begin hosting the application on Amazon Web Services (AWS)

Bug fixing and Maintenance

Ongoing development to fix the bugs that have been identified during the development stage

References

- Angular.io. (2018). *Angular Docs*. [online] Available at: https://angular.io/ [Accessed 19 Mar. 2018].

- Apache.org. (2018). *Welcome to The Apache Software Foundation!*. [online] Available at: https://www.apache.org/ [Accessed 18 Mar. 2018].

- Coulouris, G., Coulouris, G. and Coulouris, G. (2012). *Distributed systems*. Boston, Mass: Addison-Wesley.

- Docker. (2018). *Docker*. [online] Available at: https://www.docker.com/ [Accessed 18 Mar. 2018].

- Jwt.io. (2018). *JSON web tokens*. [online] Available at: https://jwt.io/ [Accessed 19 Mar. 2018].

- MongoDB. (2018). *MongoDB for GIANT Ideas*. [online] Available at: https://www.mongodb.com/ [Accessed 19 Mar. 2018].

- Spring.io. (2018). *spring.io*. [online] Available at: https://spring.io/ [Accessed 20 Mar. 2018].