
Spoiled Tomatillos

From: Team 42

Peter Battinelli
Ben Campbell
John Martin
Lisa Oakley
Ari Tang

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To: Teaching Staff

CS 4500
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Dear Teaching Staff,

Our project has five basic need categories:

- front end and design (React)
- back end (Flask)
- deployment (AWS, Jenkins)
- security
- organizational tools (Jira, Slack, and GitHub)

We have assigned a lead for each category. We are all contributing to the project in many roles so as to remain an agile start-up, but we are leveraging our varied backgrounds and expertise in order to most efficiently and effectively create a secure, smooth, polished user experience for our alpha Spoiled Tomatillos software.

Front End and Design/React -- Lead: John Martin

I have 3 years of industry experience in Javascript and 2 years of industry experience in React. I have worked for a design agency and designed multiple websites and web apps. I recognize the rest of the team is coming from many different backgrounds, some of which involve web app development and some which do not. I see the biggest challenge of the team as getting acquainted with the React framework, but I am not worried about anyone's ability to write Javascript code. I have so far taken strides to cover these gaps by bootstrapping our React front end and providing some initial scaffolding as well as some one-on-one help with team members to help get the ball rolling. Moving forward, I will continue to make myself available as the go-to

individual for questions regarding front end and design work and will focus primarily on front end related PR's. I believe the team will have little problem developing a successful React application and I hope everyone learns along the way.

Lisa: I have no experience with React or JavaScript. I do have some experience with UI design.

Ari: I have very limited experience with React, but some experience with other JavaScript frameworks.

Ben: I have a fair bit of experience with React and with other JavaScript frameworks. My expertise is not in UI design.

Peter: I have some experience using Angular as a front end framework as well as Bootstrap for styling. Javascript I am proficient in. From what little I have done with React so far I am comfortable helping develop front-end features.

Back End/Flask -- Lead: Ari Tang

I have a year of industry experience working in Python, primarily on the back end. Six months of this experience includes Flask. I have also worked on several other personal or group projects using Python and/or Flask, and feel very comfortable with it. Our team has a wide range of previous experience, including operations, front end, and back end. While we have all been exposed to Python in the past, some are not comfortable yet or have not used Flask. We've managed to fill in some of the gaps already: coming in, none of us knew how to use MongoDB or unit testing in our environment, and some had never seen a Flask app before. I created a basic Flask app with examples on how to interact with the database, and we went from there. John, Lisa, and I have been working closely to ensure that the three parts of the project we are responsible for interact properly and function as expected, with much support from Ben and Peter as well in each scenario. With a basic setup for one or two use cases already in place, I feel confident that our team will be able to tackle the rest of the project with great success, and will continue to offer myself as a resource for questions regarding Python, Flask, and the general back end architecture and best practices.

Lisa: I have a few months of experience using python, but never with flask or in a group project like this.

Ben: I have 7 months experience being a full stack python web engineer, I have only set up my own flask app from scratch once, but I am confident I can assist Ari.

Peter: I have little to no experience writing Python and Flask apps. I have limited experience working with MongoDB and creating RESTful API services in NodeJS so I am confident I can learn enough Flask to help Ari here.

John: I have a moderate amount of experience with Python, but little general backend development. I am very confident in Ari's ability to lead the team in this regard, however, as I have seen how proficient she is first hand. I hope the whole team can learn a lot from Ari in this regard. I know I already have.

Deployment/Jenkins -- Lead: Lisa Oakley

I have 6 months of industry experience working with Docker and AWS. I have also worked with CI tools such as Concourse CI and have experience both using and developing cloud deployment tools such as BOSH and Cloud Foundry. I do not have specific experience with Jenkins, but have learned a lot in this time and feel comfortable that I can make anything work that we need done. One challenge we face as a team is that we have chosen a different stack than is standard for the class. As such, we have been forced to forge our own path on some of the expectations. I fully believe we have found equivalent solutions and can work with them moving forward. Thus far, we have worked to close gaps in understanding by investigating the workings of Jenkins and facing problems with an exploratory mindset. Our biggest asset is the various backgrounds we have, and we lean a lot on each other for when the edges of our experiences bleed into one another's. Another weakness is that we have done some development before putting final quality standards into place. This means we have some technical debt to tackle, but we have put stories in the backlog to address these issues and will work to make our linting and coverage reports breaking issues.

Ari: I have no experience here.

Ben: I have no experience with Jenkins or Ops in general.

Peter: I have a few months experience working with Jenkins in a fairly older version but working through the exercises has brought me up to speed with the latest changes. I've never worked with AWS prior to now but I have experience in Vagrant and Ansible scripting. I've also worked with SonarQube in a limited fashion. I feel I have a few skills to help Lisa here if needed.

John: I have a small amount of experience in CI with tools like Wercker and Travis, but have never used Jenkins or AWS. I am very confidence in Lisa's ability to lead the time in this regard, however, as I have seen how proficient she is first hand. Lisa is absolutely indispensable to the team for her knowledge on the subject and her commitment to tracking team development progress.

Security -- Lead: Peter Battinelli

As the security lead, I have a limited amount of practical security knowledge as well as theoretical knowledge. I plan on researching how to provide adequate web security for our project on the front and back end to reduce our application's exposure. The majority of our team lacks experience in the security area. Aside from one member, we need to gain practical experience as I'm confident our theoretical knowledge can be put into practice through implementing web app best practices in security. Challenges to overcome include security for our backend and front-end through input/output sanitization. Our team started with some problems in the security realm as we had disabled CORS. After correcting this problem, we were able to verify that the security library we are using for account security produces salted and hashed passwords. Overall, I believe the team will be able to overcome our knowledge gaps and be able to provide comprehensive security for our app.

Ari: I have almost no practical experience when it comes to security.

Lisa: I have some experience learning about security, but not much in practice (especially in Linux).

Ben: I have a basic understanding of API's, OAuth, and encryption, however my practical knowledge of the services needed to secure an app are lacking.

John: I have only academic and theoretical knowledge of security, but little to no practical experience. I'm not personally aware of the level of Peter's proficiency in security, but I know he is committed and hardworking team member who will surely make strides here no matter what his current proficiency level is.

Organizational tools (Jira, Slack, GitHub) -- Lead: Ben Campbell

I have over 18 months experience using Jira as my primary agile management tool. I am very comfortable navigating Slack, integrating 3rd party services and have even created my own custom Slackbot. I have been using GitHub for over 3 years and have a firm understanding of how it works and how to best

utilize its features for maximum productivity and minimal overhead. Having an organized product is a team effort to be sure, my job is not to boss anyone else around, merely to ensure that we are using our limited time as efficiently as possible. Also It is my job to make sure that over the course of development, work done by team members is accounted for and recognized. Although we are all familiar with the services necessary to maintain organized development, we will need to put extra effort into using these services correctly. This correctness is simple in description but difficult in execution as it is easy to take the sloppy easy route. I will work to make sure we emulate the best practices used in our past employment to help best prepare us for the real world standards.

Ari: I've used these three tools in the past on various occasions, and would say I have a good working proficiency.

Lisa: I have used all these tools before extensively including work with plugins. Some of the ways we are using them for this project are new to me.

Peter: I have a large working-knowledge base for using Confluence, Jira, and Git/Github. I have extensive knowledge of the inner workings of Git. I'm looking forward to helping Ben if anything is required of me.

John: I have extensive knowledge and experience of all three of our organizational tools. Ben knows all about these tools as well and I have strong confidence in his ability to lead the team organizationally.

Sincerely,

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