

Virtual Advance Academy

Senior Design Project - Spring 2020

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The Problem



Students are eager to land their **dream internship or full-time jobs**, but are overwhelmed by the entire process. "Where should I start?", "How do I talk to recruiters?", "How do I create a polished resume?" and "How can I succeed at behavioral and technical interviews?" are all common questions students have.

Current System



Upsilon Pi Epsilon (UPE) created **Advance Academy**, an 11-week program, with cohorts of up to 10 students. Advance Academy covers all the major topics in recruitment as well as providing the opportunity to implement the skills they learn each week. The outcome of the program is that it assists students on their journey towards landing their dream internship or full-time job.

Our Solution



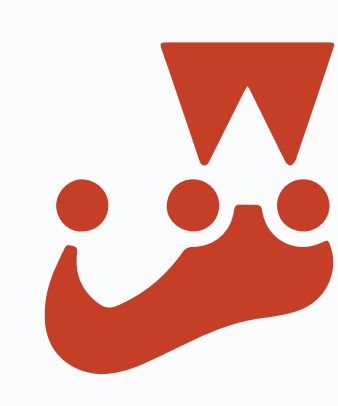
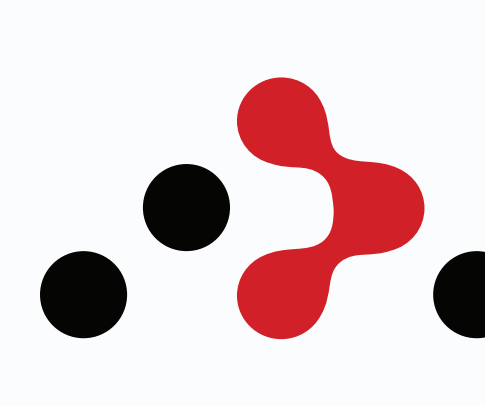
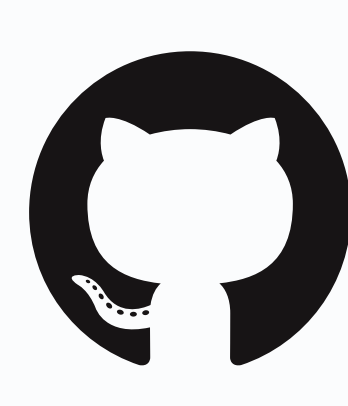
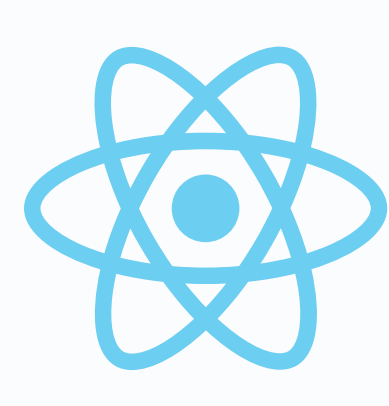
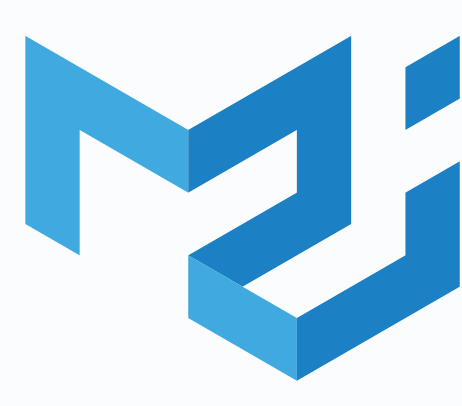
We created an **online compliment** to Advance Academy, where students can access the content regardless of whether they're a part of the program or an FIU student, as well as customizing the content for each student based on their previous experience or knowledge.

The Requirements



- ✓ **Responsive design** for usability
- ✓ **User profiles** to store progress
- ✓ **Five critical modules**, ready to go and filled with content
- ✓ An **interactive survey** to help gauge a new user's skills
- ✓ A **customized experience**, based off information collected
- ✓ **Auxiliary information** focusing on continued learnings, as well as first hand information from industry pros

Built With



Diagrams

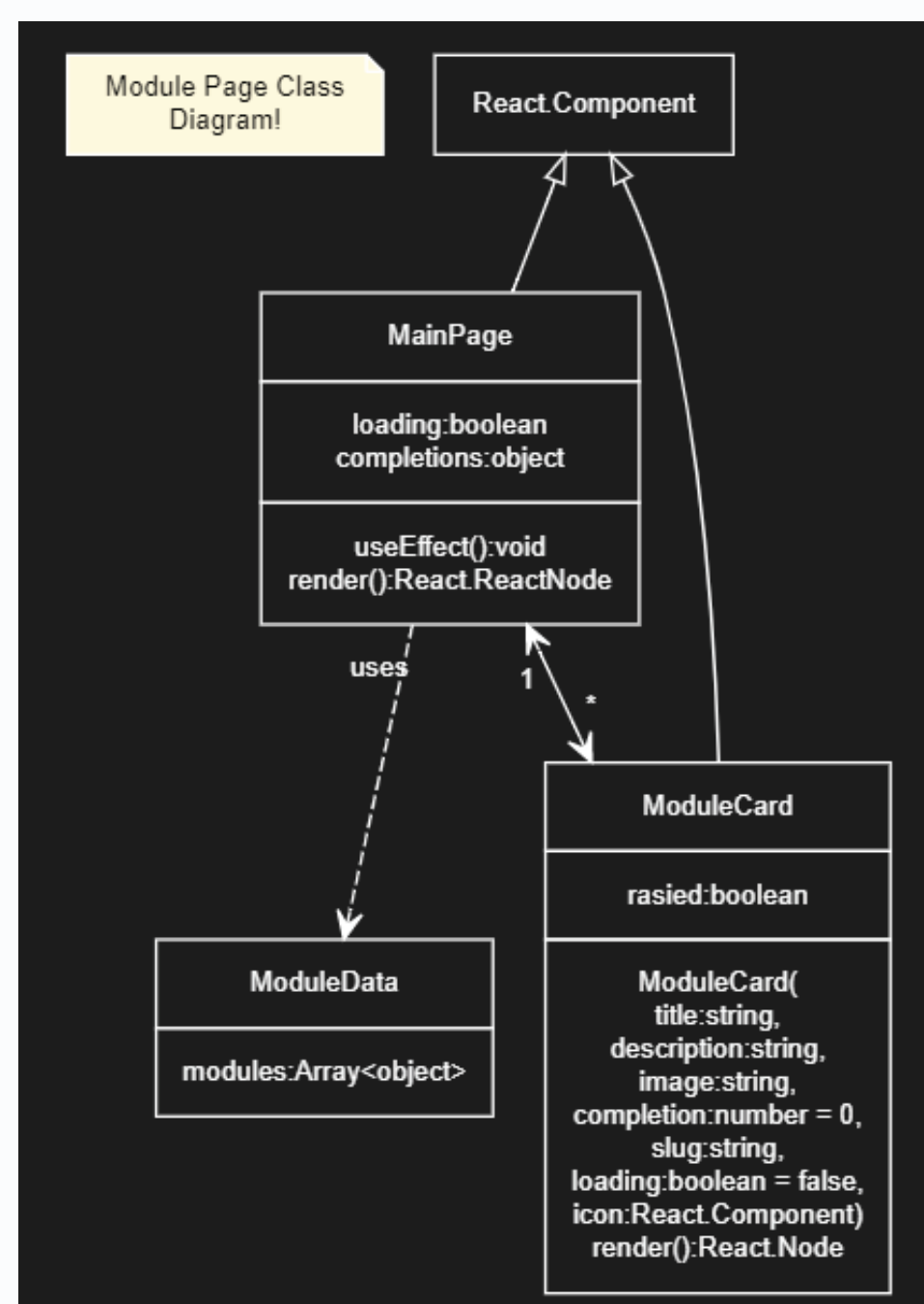
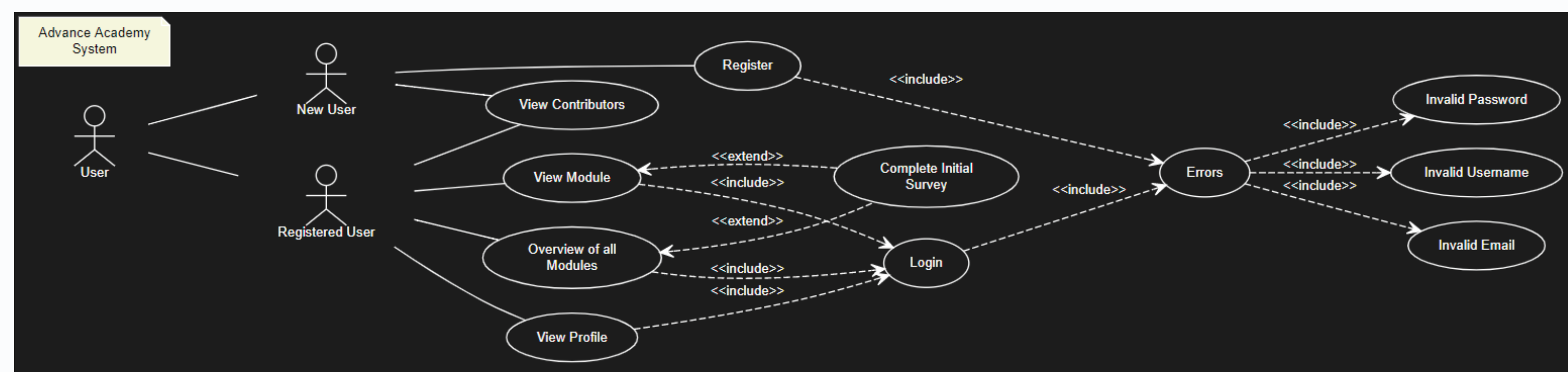
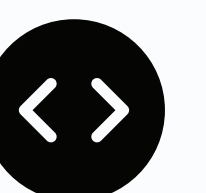


Figure 1 (Left): Class Diagram showing the structure of the Module Overview and the related classes that interact with it
Figure 2 (Below): Use Case depicting all major use cases for the application
Figure 3 (Right): Sequence Diagram of the interactions between the user, the frontend, backend, and database when the Module Overview page is requested



Implementation



The software solution was developed on Visual Studio Code and implements the MERN (MongoDB, Express.js, React, Node.js) stack. For the frontend, we make use of Material UI for rapid UI development. Doing so allowed us to focus more on delivering features instead of creating styling from scratch. Automated testing is done via Jest and deployments are automatically served via Heroku when code is merged on the master branch

Summary



Our team was able to complete a version 1.0 application within 12 weeks, covering a total of 41 user stories. We were also able to lay foundational ground work that will empower the next team to continue adding even more useful features to the application, such as blogging, resume review, and much more.

Screenshots

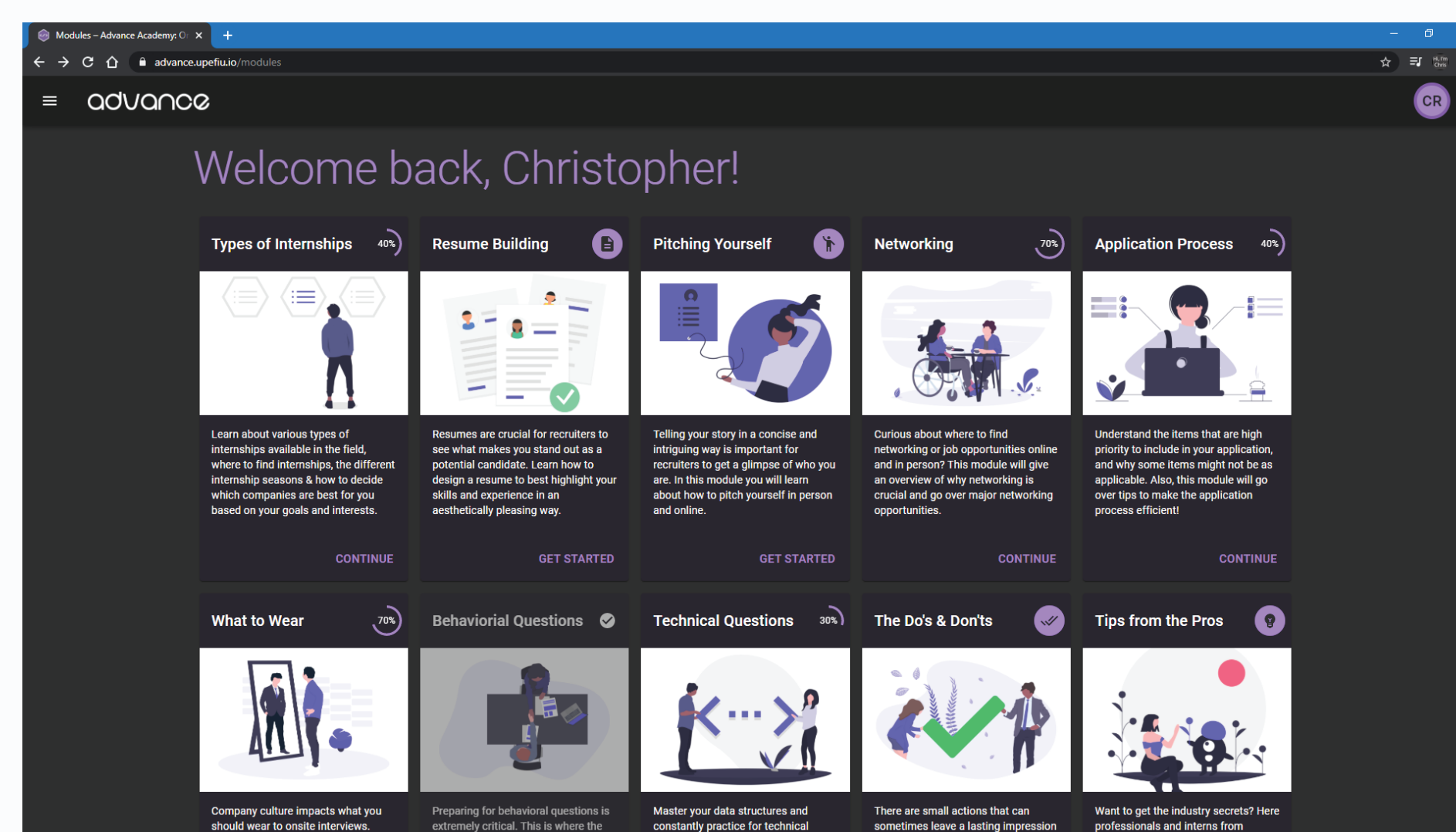


Figure 4: Module overview page via desktop

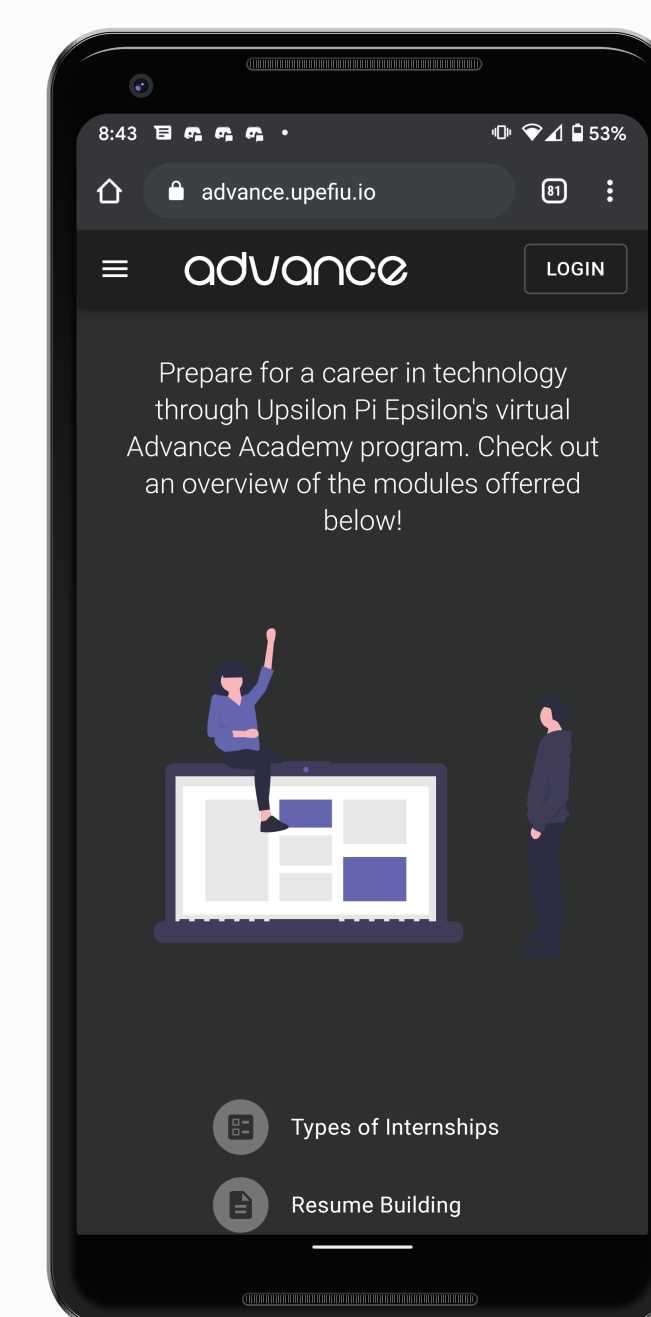


Figure 5: Homepage via smartphone

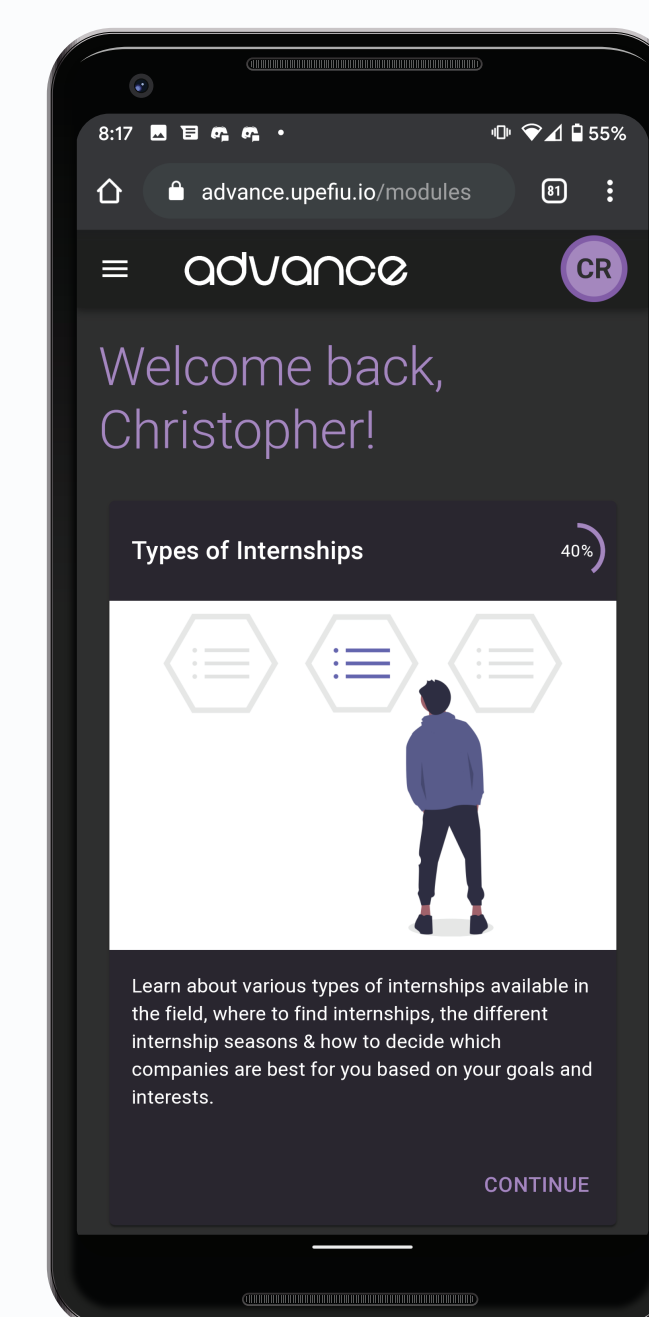


Figure 6: Module overview page via smartphone

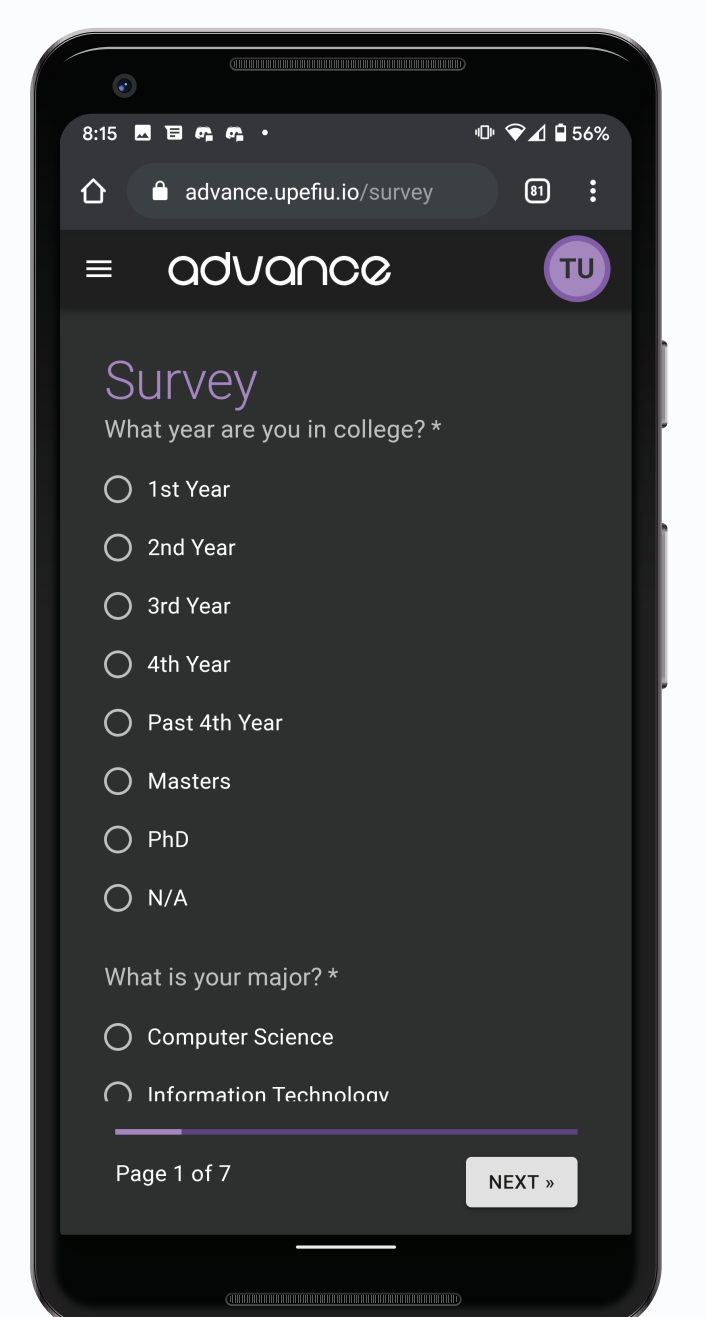


Figure 7: Survey page via smartphone

Acknowledgements

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