Individual Capstone Assessment

Monica Escobedo Barahona

9.10.2025

Packing Pal is a tool designed to help users create personalized packing lists tailored to their specific needs and preferences. Our team plans to develop the project using React and integrate AI technology to enhance customization and efficiency. The application will initially be built as a web-based platform optimized for desktop use, with the potential to expand to mobile devices if time permits. We also aim to provide flexibility for users by allowing them to generate lists without logging in, while still offering an account option for those who want to save and revisit their packing lists. This project combines both practical problem-solving and technical skills, making it an exciting challenge. By the end of development, we hope to create a tool that is not only helpful but also easy for anyone to use.

My classes here at UC have also prepared me for this project. In my Database Systems class, I used React for the front end and made sure the interface worked properly. In my Web Design class, I gained more experience with HTML and CSS, which will help me build a clear and user-friendly application. These courses gave me the technical skills I need and taught me how to approach problems in a structured way. They also gave me the confidence to work with web development tools and understand how different parts of a system connect. By practicing these skills in class, I feel more ready to apply them in a real-world project like Packing Pal.

In addition, my co-op experience has prepared me for our senior design project. As an intern at the Build Your Own Computer (BYOC) Camp, I taught students coding, web design, and robotics while also working on PC assembly. This helped me strengthen my technical skills and taught me how to explain ideas clearly to others. I also worked with other interns to design and deliver STEM workshops, which improved my teamwork and communication. In addition, my experience as a Cloud Security Pre-Apprentice in the iQ4 Workforce Development Program gave me practice analyzing risks and creating solutions with a team. These roles taught me both technical and non-technical skills that will be useful for working with my teammates and solving problems during one project.

I am motivated to work on Packing Pal because it connects to skills I already have and lets me keep learning. In my classes and past projects, I have used React, HTML, and CSS, so this project feels familiar. At the same time, it give me the chance to practice these skills more and improve. I am also excited because the project solves a real problem that many people face when preparing for trips. Making a tool that is practical and helpful makes the work feel more meaningful. This mix of learning, growth, and usefulness motivates me to do my best on the project.

Our first approach to building Packing Pal will be to list the main features we need, like creating lists, customizing them, and saving them with a login. After that, we will make simple

sketches or wireframes to plan what the website will look like. We plan to build the front end first with React and then connect it to the back end. To stay organized, we also talked about using a Gantt chart or a similar tool to keep track of tasks and deadlines. Once the basic version is working, we will test it and add AI features to improve customization. I will check my work by making sure my code runs well, meets the requirements, and is easy for my team to use. I will know I did a good job if my part works smoothly and makes the app easier for users.