

Douglas College



Module Code:

CSIS 4495 – 071

Module Title:

Applied Research Project

Year & Semester:

2025 Fall

Project Reports -2

Alternative Industries: Weather Driver

Student Id: 300392983

Student Name: Pukar Ojha

Instructor: Bambang, Sarif

Due Date: Oct 11th , 2025

Date	Number of hours	Description of work done
Sept 30, 2025	1.5	I joined a group meeting where we discussed the progress made so far on the project. During the meeting, I presented the screens I had completed and received helpful feedback from my teammates about improving the UI layout and consistency across screens. The client also provided us with some learning materials and encouraged me to start exploring Amazon Web Services (AWS) to prepare for future backend integration. This helped me set a clear direction for my upcoming learning tasks.
Oct 2, 2025	5	I spent the day studying the official Amazon AWS documentation, focusing on understanding key services such as Amplify, DynamoDB, Lambda functions, Amazon Cognito, and API Gateway. My main goal was to learn how each of these components works together in creating scalable applications. I made detailed notes and diagrams to connect how these services could support our project's authentication, data storage, and API management requirements.
Oct 4, 2025	3	I met with my teammates to go over the feedback we had collected earlier. Together, we reviewed the login and signup screens and identified a few visual and logical issues. I worked on fixing these bugs and improving the overall flow so that users could navigate more easily. This collaborative session helped ensure that

		our front-end design matched the client's expectations and Figma layout.
Oct 6, 2025	5.5	I watched several tutorial videos shared by the client that explained how AWS works in mobile and web development projects. While watching, I also conducted my own research to fill in the gaps and deepen my understanding of AWS concepts like hosting, authentication, and API integration. I began to see how these cloud services could simplify our backend work and make our project more reliable.
Oct 7, 2025	4	To gain practical experience, I created a separate GitHub repository where I could freely experiment with AWS services without affecting the main project. This allowed me to test configurations, deployments, and service connections hands-on. Setting up this environment gave me confidence in using Amplify and other AWS tools independently.
Oct 9, 2025	5	This was one of the most productive days of the week. I successfully deployed the test repository using Amazon Amplify and implemented user authentication through Amazon Cognito. I configured Lambda functions to handle login and signup triggers and stored user information in DynamoDB. By completing this workflow, I was able to understand how different AWS services interact to form a complete backend system. It was a major learning milestone for me.
Oct 10, 2025	3	I spent this day focusing on design improvements. Based on the new Figma updates from our client, I redesigned the

		project logos and refined the splash screen to create a smoother visual transition into the app. I also adjusted the screen flow to make navigation feel more natural. These small but important refinements helped make the interface more cohesive and visually appealing.
Oct 11, 2025	4.5	I attended a class session with our professor to review progress and discuss the research I had conducted on AWS. Later, our group met with the client to present our recent work and get feedback. The client informed us that some screens would need to be paused as their design team was revising them. On the technical side, I explored and started working with the Google Maps API, learning how to integrate mapping and geolocation features for the app's next phase. I also completed a detailed research documentation file summarizing all my findings and added the link to the experimental GitHub repository in the same document for easy access. Finally, I resolved code conflicts, finalized my work logs, and ensured everything was updated and organized in GitHub.

Description of the work done: (Sept 30 – Oct 11, 2025)

During this two-week period, my work focused on both technical growth and collaborative development. I started by presenting my progress in team meetings, receiving valuable feedback, and making UI improvements to create a smoother and more consistent user experience. The majority of my effort was dedicated to understanding and applying Amazon Web Services (AWS) — including Amplify, Cognito, DynamoDB, Lambda, and API Gateway — which form the backbone of our project's backend system.

By setting up a separate GitHub repository for testing, I was able to safely experiment with AWS components, deploy a functional test project, and implement user authentication and data storage. These exercises gave me a deeper understanding of how scalable backend systems operate in a cloud environment.

In addition to the AWS work, I began exploring the Google Maps API, researching how to integrate location-based and mapping functionalities into our app. This included learning about API keys, marker placements, and dynamic route generation, which will be crucial for the next phase of the project. To keep everything well-documented, I created a comprehensive research report that includes both AWS and Google Maps API notes, along with my test GitHub repository link for future reference and team access.

This period was extremely productive in terms of learning, collaboration, and technical implementation. I not only enhanced the design and flow of the user interface but also strengthened my backend and cloud computing skills. Regular communication with both the client and professor ensured that my work remained aligned with project goals and deadlines.

Attached References:

- AWS and Google Maps API Research Document: [Deployment of the app.docx](#)
- Experimental GitHub Repository: <https://github.com/Pukarojha/wildrydes-site.git>