Part A:

Jacob Kennedy

Parth Patel

Brendan Pollak

This is the team contract for Team PBJ. We will be meeting bi-weekly to work on our project together. This is because we’re going to be practicing and learning with some new technologies most likely so we need individual time as well to flesh those out. If we need more time together, we will bump that up to weekly meetings. We envision probably spending an hour for each meeting as they will be more for coordination and the actual programming will go on outside of those. Our focus is going to be some sort of web development, web scraping, and cloud computing. We hope to create some sort of trip/event planner as this will give valuable experience with web scraping as well as hitting existing API endpoints from companies. After the relevant scripts/code is written, we’re expecting to host it all on some AWS cloud infrastructure. We are going to do everything equally. We all have some relevant experience in different aspects of the project so our plan is to have everyone implement their experience and then show each other what they did so we can all learn and grow from it. This experience being: Jacob has experience with cloud infrastructure and will set that part up, Parth has cyber experience so Jacob and Parth will work together to make sure the cloud is secure, and Brendan has HTML experience so that will be helpful in actually developing our webpage. Outside of that, we’re going to divide everything else so we all contribute equally.

Parth B:

Parth Patel

CS 5001

Dr. Annexstein

09/09/2023

Senior Design Essay

Our senior design project's main objective is to create a dynamic website that resembles Tripadvisor, a well-known platform for user-generated travel reviews and suggestions. Our extensive academic background in computer science and web development, as well as the wide range of skill sets, we developed through co-op placements, are all included in this senior design project. We hope to create an immersive and user-centric platform for travelers to explore, review, and share their trips through our project, which is inspired by our mutual enthusiasm for technology and a profound admiration for traveling. Features like restaurant and hotel ratings are something we wish to include.

Our academic journey as computer science majors has furnished us with the essential technical knowledge and robust problem-solving skills needed for this project. Courses such as Python Programming (CS 2021) have helped us understand the Python language which we will be using to code this. In that class we learned how we can use python to code websites and it is probably the easiest language to code in. Furthermore, CS2028C Data Structures has helped understand the foundation of coding and how it will be needed to create this project. In a project that involves collecting and organizing large amounts of data, understanding data structures is crucial. Data structures taught us how to choose the right way to store and retrieve information efficiently. For example, we might use data structures like arrays, lists, or trees to manage user profiles, reviews, and location data on the website. Knowing how to organize this data optimally can significantly improve your website's performance. Lastly, classes like CS4071 Design and Analysis of Algorithms class equipped us with the skills to develop efficient, responsive, and user-friendly features for our travel website. These algorithms can help us enhance user experiences, optimize resource usage, and manage the growing volume of data that such a platform would inevitably encounter.

My co-op experiences at Ameritas Insurance, where I worked as a Cyber Security Intern, have played a pivotal role in shaping my readiness for the multifaceted challenges inherent in this senior design project. These experiences have not only fortified my technical prowess but have also underscored the significance of effective teamwork, project management, and clear communication when constructing intricate web applications. At Ameritas Insurance, my role as a Cyber Security Intern primarily focused on the organization's cybersecurity measures. While the role didn't involve full-stack web development, it provided me with a deep understanding of security protocols and measures, which is invaluable for ensuring the safety and integrity of our upcoming project. This unique perspective complements our team's skill set, enhancing our ability to build a robust and secure travel website. At Ameritas I led a project for 6 months and completed it. This helped me understand team collaboration and how to manage a team. This skill will be helpful in this project.

My drive for this senior design project comes from a mix of my tech skills and a genuine passion for travel and discovery. It all started during my internship at Ameritas Insurance, where I served as a Cyber Security Intern. This unique experience gave me insight into safeguarding systems and data, which is pivotal for ensuring the security of our upcoming project. Our project kicks off with thorough market research to spot gaps in existing travel recommendation platforms. We're gearing up to craft a user-friendly website loaded with cool features: think personalized user profiles, spot-on location-based search, and a review system that truly rocks. Two things we won't compromise on. Data accuracy and seamless user experience. Our big vision is to create an all-in-one platform that empowers travelers to make smart choices and share their epic travel stories within a global community of like-minded adventurers.

For us, keeping track of our progress is key. We've set clear project milestones, including getting those essential features up and running, running thorough user tests, and making sure the site runs like a dream. Success for us isn't just about the technical stuff; it's about how much our users love it. We'll be chatting with our fellow students and mentors to get feedback and keep making our platform better. Our main goal? Delivering a website that's as awesome as it is user-friendly, making every traveler's journey even more epic. In summary, our senior design project, which is all about making a website like Tripadvisor, really shows how much we're into using our tech skills for solving real-world stuff. It's like we're combining all the things we learned in class with what I did during my internship at Ameritas Insurance. This project is like the perfect mix of college and real-life experiences, and it's a sign of how much we want to use tech to make things better for regular folks. We're pumped to make a website that travelers can totally rely on and have a blast using to plan their adventures. It's all about our love for tech and wanderlust, and we can't wait to share it with the world!