



Knight Foundation School of Computing and Information Sciences

Summer 2024 Senior Design Project

Weather App

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PROBLEM

- Unpredictable weather conditions can significantly affect daily plans and decisions, such as canceling trips or outdoor activities. Our team aimed to create a weather app that provides real-time, accurate weather updates to help users plan accordingly.
- I contributed to identifying the core problem and helped define the direction for our project, focusing on user needs and accurate weather updates.

SYSTEM DESIGN

- The system was designed to be scalable and maintainable, using React to build the user interface and integrating the OpenWeather API for real-time weather data. Visual Studio Code was chosen as the IDE for development.
- I collaborated with the team in the system design phase, focusing on the integration of the OpenWeather API and contributing to ensuring the design met our project requirements.

REQUIREMENTS

- The project required a reliable weather data source, a responsive user interface, and seamless integration between components. We used JavaScript, HTML, and CSS for development, and chose React to build the user interface. The OpenWeather API was selected for fetching weather data due to its reliability and comprehensive documentation.
- I actively participated in gathering requirements and played a key role in evaluating and selecting the OpenWeather API.

IMPLEMENTATION

- The app was developed using React within Visual Studio Code, employing JavaScript, CSS, and HTML. We fetched weather data using the OpenWeather API, which required an API key for accessing real-time data.
- I helped in implementing the OpenWeather API, to ensure correct integration and functionality. Additionally, I oversaw maintaining thorough project documentation.

SUMMARY

- Our team successfully developed a real-time weather app that provides accurate and timely weather updates, helping users make informed decisions. The app was built using React and integrated with the OpenWeather API to ensure reliable weather data.
- I played a key role in selecting and integrating the OpenWeather API, organizing and leading scrum ceremonies, updating scrum documents, keeping the team on track with sprints, verifying our design met project requirements, and ensuring comprehensive project documentation.

