For our (POE), we used AI tools to streamline the development process of our bird observation app in Android Studio. The app’s primary purpose is to facilitate bird watchers by providing a simple platform to log observations, view records, and track data metrics, with a smooth and visually appealing design. AI played an essential role in various aspects, from coding assistance to design ideas, which allowed us to work more efficiently and focus on delivering a quality product.

One of the first components implemented was the login page, which ensures secure access to the app’s features. Using AI-powered coding assistance, we could generate reliable code snippets for user authentication and session management, reducing errors and saving development time. AI tools also suggested ways to enhance the login experience, like adding validation feedback for incorrect login attempts, which improved usability.

Next, we focused on the observation pages. The "Add Observation" page allows users to input bird details, such as species, location, and time. AI tools helped by suggesting libraries and methods for creating input fields, validating data, and storing entries in a local database. When working on the "View Observation" page, AI-assisted us in implementing data retrieval and display functions. This page allows users to see their recorded bird sightings, and AI guidance helped us streamline list displays, ensuring smooth scrolling and optimized performance.

The metric system was another crucial feature, offering users insights into their bird-watching activities, such as the number of observations and common species encountered. AI tools supported our implementation of basic statistical functions and data visualization, which allowed us to create charts and summaries of users' observations without extensive manual coding. The ability to integrate charts and metrics quickly enhanced the app’s value, making it not only a logging tool but also a platform for users to analyze their data.

Finally, AI tools assisted with the overall design of the app, helping us generate ideas for user interface (UI) layout, color schemes, and icons. By analyzing popular design trends, AI tools suggested aesthetic choices that matched our app’s purpose, providing an attractive and functional user experience.

In summary, using AI in the development of our bird observation app helped streamline complex coding tasks, ensured efficient implementation of features like login and observation pages, provided accurate metric calculations, and refined the app’s visual design. AI was an invaluable asset, empowering us to deliver a fully functional and user-friendly app within our project’s timeframe.