AI usage reflection

# AI Usefulness

For this project I used Chat GPT to help me build an app in React Native. The ability to use AI for this project enhanced my app, as well as my knowledge on certain aspects of app building. The tool assisted me in generating ideas on features to implement in the app, followed by the code to do so.

A specific aspect of the project that I found AI most helpful was debugging. As I was building this app directly from Visual Studio Code, there was many errors coming up when trying to set up that environment. Chat GPT was great help when telling me which packages I’m missing, providing steps on installing Expo and similar, and accompanying that with the logic behind why the error occurred.

AI was really useful when it came to executing ideas that it would normally take a lot of time to learn. In my app, I wanted to include recommendations based on the user inputted ratings, to which Chat GPT generated various different options on doing so, such as integrating API’s or fetching the data from an already populated database. Although my app is lacking some of the functionalities I wanted to implement, I was able to see how generative AI could assist in future projects.

# AI Limitation

The main limitation of using AI for this project was its inability to meet the exact requirements of my questions. On a few occasions, such as when I provided it with the full project brief and rubric, it would generate answers completely out of specification. I found that its better effective when dealing with tiny fractions of code that need fixing or improvement. Similarly, in my experience Chat GPT was unable to store code to its memory. It was unable to build on previous code (provided by be or generated by it), which required me putting in the same code multiple times.

Often the memory issue would also result in it giving me code that produced errors. For example, it made some mistakes with using different types of navigation with different versions of my updated code.

The memory also affected asking for ideas on improving the app. I gave Chat GPT the brief for the project, as well as the code I had so far. My expectation was that this would be stored long term and I could ask it for ideas on what next to implement or improve. However, it never remembered the brief or the requirements. This resulted in me having to re-introduce it to the project many times, making progress slower than expected.

Another limitation I found came with using AI is that mostly it produces code that I am not yet familiar with. By attempting to use some of the more advanced and sophisticated methods, it was harder for me to deal with errors and figuring out where it went wrong. This also comes from the lack of experience on how to effectively use AI.

# Learning and Functionality

Chat GPT improved my knowledge on constructing apps mostly by helping me with the errors. I now can identify what certain errors such as “undefined index” mean due to the constant repetition of the same. Chat GPT is useful in this situation because each solution comes with a detailed explanation, so the information gets retained after a few times.

This approach also helped me get to know some of the more cosmetic enhancements that could be implemented in an app. As in class we mostly focus on the functionality, using AI is a good and quick way to implement the aesthetics to an app, keeping your focus on its functionality. With some practice on the effective use of AI, it could be a great tool for expanding knowledge and help get familiar with the logic behind common errors.

AI generated great ideas and the code to execute some functionality features. With proper implementation, I think the functionality of my app would’ve been greatly enhanced with the help of Chat GPT.

# Prompt Log

## November 25th, 2024

Expo set up chat:

<https://chatgpt.com/share/675955b0-0d6c-8005-ac7f-a19e314b4dd2>

## November 27nd, 2024

1. What should my package.json have if im using tab navigation?
2. how would the book recommender app suggest books based on past reading and reviews
3. write me starter code that would produce a login page for this app
4. the webpage is blank when i run npx expo start + w
5. Web Bundling failed 733ms C:\Users\Korisnik\project\index.js (468 modules) Unable to resolve "firebase" from "firebaseConfig.js"
6. import React, { useState } from "react"; import { View, Text, TextInput, Button, StyleSheet } from "react-native"; const AddBookScreen = () => { const [bookTitle, setBookTitle] = useState(""); const [bookAuthor, setBookAuthor] = useState(""); const handleAddBook = () => { if (bookTitle && bookAuthor) { alert(Book added: ${bookTitle} by ${bookAuthor}); // You can add functionality to save the book data to a database or state here } else { alert("Please enter both book title and author."); } }; return ( <View style={styles.container}> <Text style={styles.title}>Add a Book You're Reading</Text> {/\* Book Title Input \*/} <TextInput> style={styles.input} placeholder="Book Title" value={bookTitle} onChangeText={setBookTitle} </TextInput> <TextInput> style={styles.input} placeholder="Book Author" value={bookAuthor} onChangeText={setBookAuthor} </TextInput> <Button> title="Add Book" onPress={handleAddBook} </Button> </View> ); }; const styles = StyleSheet.create({ container: { flex: 1, justifyContent: "center", alignItems: "center", padding: 20, backgroundColor: "#f5f5f5", }, title: { fontSize: 24, fontWeight: "bold", marginBottom: 20, }, input: { width: "100%", height: 50, borderColor: "#ccc", borderWidth: 1, marginBottom: 15, padding: 10, borderRadius: 5, backgroundColor: "#fff", }, }); export default AddBookScreen;

(Provided code) How do I make it so when I click add book, it gets added into a firebase database?

1. how do i meet the prerequisites for integrating firebase with my app

## December 2nd, 2024

1. modify code so that the user can also input the genre and rating of the book
2. modify the rating so that it is in star shaped rating form. eg airbnb type rating
3. will these types of ratings also save to firebase
4. add a book list screen that shows all the users saved books+author+genre+ratings
5. now I need the app to retrieve data from firebase. i want to make a screen showing the list of users inputed books.

## December 8th, 2024

1. My mobile app so far has a home scree from which the users can access the add book screen where they can add and rate the books theyre reading and book list screen displaying books and ratings. rubric for A grade in project: You have used a broad range of different UI components from a range of different libraries. You have incorporated and used components not shown to you in labs or lectures. User uploaded content/images may have been stored in Firebase. Your idea departs greatly from previous examples and includes new elements not shown or demonstrated in class. UI components have been put together in ways not common in other commonly available apps Your app uses useState() hook variables that include arrays of objects. This data is saved in firebase and displayed within the app. The data can be modified by the app and saved again. The spread operator has been used to modify the data in an arrayYour app is very professional looking. All the images used render well, are sized, aligned and border in a way that makes your app appear slick and professional. There is a good diversity of UI components and they have been used in a way that enhances the user experience. The thumbzone of your app has been considered and will make it easy to use. There are strong "call to actions" in your app that guide the user through the flows of your app. The app flows nicely between screens. What can i implement in the app to recieve an A
2. how can i implement book recommendations
3. how can i do this without using apis as it might not fit the project spec
4. i want to allow users to delete books from their list
5. add a swiper for navigation between screens

## December 10th, 2024

1. add some simple UI elements to this app
2. how can i make the rating component look nicer
3. button doesnt navigate to book list screen (provided code for book list screen)