CP3406 / CP5307 Assignment 1: Code Review Presentation

Overview

In this task, you are required to conduct a Code Review Presentation that serves as a proposal for your final Android app assignment. You will present an overview of your planned approach for solving the problem presented in one of the sample problem statements (see Appendix 1). This presentation will demonstrate your understanding of the tools and concepts introduced so far in the course, including **Kotlin**, **Jetpack Compose**, **Material Design Components**, and **UI/UX considerations**.

Your presentation will involve explaining the problem statement you've chosen, identifying your target audience, performing a brief competitor analysis, and outlining the features and functionality you intend to include in your app. Additionally, you will mock up some key UI components and screen designs using **Jetpack Compose** and **Material Design** and explain how they fit into the app's overall design.

We recommend following the [Assertion-Evidence approach](#) for presentations.

Key components of the presentation

The following provides a suggested structure for your presentation.

1. **Introduction to the Problem Statement** (2 – 3 minutes)
   - Briefly describe the problem you are trying to solve with your app.
   - Discuss the relevance of the problem in today's context and why it's worth addressing.
   - Choose from one of the provided scenarios to develop your problem statement (see Appendix 1).

2. **Target Audience** (2 minutes)
   - Define the target users for your app.
   - Describe the user persona(s) that your app is designed for, including their needs, preferences, and behaviours.

3. **Competitor Analysis** (2 – 3 minutes)
   - Identify at least two similar apps or competitors that are already in the market.
   - Discuss how these apps solve the problem and what their strengths and weaknesses are.
   - Explain how your app will differentiate itself from these competitors and offer unique value.

4. **Proposed Features** (1 - 2 minutes)
   - Provide an overview of the key features of your app based on the problem statement and your target audience.
   - Discuss how these features will address user needs.

5. **Mockups of Screen Designs** (1 – 2 minutes)
   - Show mockups of key screens and layout designs using Jetpack Compose.
   - Provide an overview of how you achieved these designs in code (i.e., what Composables did you use?).
   - Explain how each screen of feature fits into the user flow and the overall app functionality.
   - Discuss any challenges or trade-offs you have considered while designing and implementing the UI using Jetpack Compose and Material Design components.

6. **Timeline** (2 minutes)
   - Present a brief timeline for the development of your app.
   - Break down the key milestones and deliverables (e.g., wireframe, MVP, testing).
   - Describe any project management strategies or frameworks that you will follow.
   - Ensure that the timeline aligns with the overall course schedule.

7. **GitHub Repository and Version Control** (1 minute)
   - Discuss your plan to use a GitHub repository for version control throughout the development of the app.
   - Provide a link to your GitHub repository where you will upload your code and project files (to be submitted with your presentation recording).

Submission Guidelines

- Your presentation must be **10-15 minutes** in length.
- It must include your face (webcam), audio (microphone), and slides/supporting visuals (screen share). OBS Studio is a recommended software tool for recording your video.
- Upload a recording of your presentation video and your slides to the submission link on LearnJCU.
- Provide a link to your GitHub repository in your submission. Commit your initial project work.
- Check your LearnJCU site for the due date.

Academic Integrity

- This is an **individual assignment**. You are expected to complete this assignment independently. Any form of academic misconduct, including plagiarism, collusion, and inappropriate use of GenAI, will be pursued according to the Coursework Academic Integrity Policy and Procedures.
- Proper citations should be provided for any sources, or content that is not your own or that you have consulted during the preparation of the assignment.
- Any use of generative AI must be appropriately acknowledged and include a Declaration of AI-Generated Material (submit this with the assignment).

Marking Rubric

Criterion	Weight	Exemplary (80-100%)	Good (65-79%)	Satisfactory (50-64%)	Poor (35-49%)	Very Limited (0-34%)
Problem Statement	15%	Clear, concise, and well-defined problem statement is conveyed. Shows thorough understanding of the issue.	Good understanding of the problem is conveyed with a clear explanation.	Problem is identified by lacks depth or clarity.	Problem is unclear or poorly defined.	Problem is not addressed in the presentation.
Target Audience	10%	Thorough, well-researched description of target audience with detailed personas and use cases.	Good description of target audience with clear personas.	Target audience is mentioned but lacks depth or is too generic.	Target audience is poorly defined.	Target audience is missing from the presentation.
Competitor Analysis	15%	Comprehensive competitor analysis with strong insights into strengths, weaknesses, and gaps.	Competitor analysis is presented with good insights into similar apps.	Some competitor analysis but lacks detail or comparison.	Competitor analysis is attempted but comparison is very weak.	No competitor analysis is mentioned.
Proposed Features	20%	Features are well thought out and clearly aligned with problem and audience needs.	Features are appropriate, though may need further development.	Features are basic but lack clear alignment with the problem or audience.	Features are underdeveloped or lack relevance to the problem statement.	Features are not mentioned or completely irrelevant to problem statement.
UI Mockups & Design	10%	High-quality mockups with clear explanations of design decisions, user flow and code use.	Clear mockups with some explanation of design choices.	Mockups presented but lacking in detail or clarity in design decisions.	Mockups are poorly designed with limited explanation on design decisions.	Mockups are missing.
Timeline & Milestones	10%	Clear, realistic timeline with logical milestones and deliverables.	Good timeline with milestones but may need more detail or adjustments.	Timeline is provided but lacks sufficient detail or some aspects seem unrealistic.	Timeline is very limited and/or infeasible.	No timeline presented.
GitHub Repository & Version Control	5%	Well-organised GitHub repository with clear version control practices for this project described.	GitHub repository is set up and functional, though may have minor organisation issues.	GitHub repository is created but lacks structure or does not always follow version control practices.	GitHub repository is provided but very minimal or no commits made and poorly organised.	No GitHub repository.

Criterion	Weight	Exemplary	Good	Satisfactory	Poor	Very Limited
Presentation Delivery	**10%**	Engaging and professional delivery with clear articulation of ideas and smooth transitions. Sticks to time limit.	Clear delivery with minor issues in timing or flow. Sticks to time limit.	Delivery is satisfactory, but sometimes unclear or lacks smooth flow between sections. Sticks to time limit.	Delivery needs major improvement and is often unclear and disjointed. Too short or too long.	Delivery is very unclear, rushed, or hard to follow. Too short or too long.
Overall Clarity and Cohesion	**5%**	The entire presentation is cohesive, well-structured, and easy to follow. Adheres to the assertion-evidence approach.	Presentation is clear, but minor gaps in structure or clarity. Mostly adheres to assertion-evidence approach.	Presentations lacks cohesion or some sections are underdeveloped or lack supporting visuals. Only some slides adhere to assertion-evidence approach.	Presentation is disjointed or poorly structured throughout. Very limited use of the assertion-evidence approach.	Presentation is very disjointed and difficult to follow. Poor structure and no use of assertion-evidence approach.

Appendix 1: Scenarios

Scenario 1: Personalised Health and Wellness Assistant
John is a busy professional with a hectic work schedule, but he is committed to staying fit, eating healthy, and maintaining good mental health. However, he struggles with consistency due to the overwhelming number of separate apps he uses to track his fitness, sleep patterns, meal planning, and mental well-being. These apps don't communicate with each other, leaving John frustrated with managing multiple platforms and losing sight of his overall wellness goals. He needs a comprehensive, all-in-one wellness app that personalizes his health goals based on his preferences, habits, and progress, while simplifying his tracking efforts. The app should integrate his fitness routine, diet, and mental health activities into a single platform, providing an efficient and personalized approach to wellness.

Scenario 2: Elderly Care Coordination Platform
Mark is the primary caregiver for his elderly mother, who suffers from dementia. This responsibility involves coordinating her medication schedules, doctor's appointments, and care routines with multiple family members. However, managing these tasks is increasingly difficult as his mother's condition progresses, and the family often experiences confusion or missed appointments. Mark is looking for an app that will streamline caregiving duties, allow him to track his mother's medication schedules, appointments, and daily routines, and keep everyone in the family informed in real time. By ensuring better organization and communication, the app can help reduce stress and prevent mistakes in caregiving.

Scenario 3: Book and Reading Tracker
Ryan is an avid reader who loves discovering new books but often struggles to keep track of the books he has read, his thoughts on them, and which books he wants to explore next. While browsing through endless lists of recommendations can be overwhelming, he wants a tool that allows him to easily log the books he's reading, track his progress, rate books, and write personal reviews. In addition, the app should suggest books based on his reading history and preferences, helping him discover books he may enjoy without the need for endless browsing.

Scenario 4: Food Waste Reduction Tracker
Maria and her family have a common problem: they frequently throw away food because they forget about items in the fridge or pantry, leading to wasted money and resources. Despite their best efforts, they struggle to keep track of what they have at home, which causes food to spoil before they can use it. Maria is determined to minimize food waste and be more mindful of their consumption habits. She wants an app that can help her track the food they have at home, suggest recipes based on available ingredients, and remind her of expiration dates to ensure that food gets used before it goes bad. The app should help Maria save money, reduce waste, and make meal planning easier by suggesting creative ways to use leftover ingredients and avoid unnecessary grocery shopping.

Scenario 5: Pet Health and Wellness Tracker

Alex is a dog owner who wants to ensure that his beloved dog, Max, stays healthy and happy. However, like many pet owners, Alex struggles to keep track of important tasks related to Max's health, such as scheduling vet appointments, remembering vaccination dates, and managing regular exercise routines. He worries about missing appointments or not giving Max enough exercise or the right type of food. Alex needs an app that can act as a comprehensive pet health and wellness tracker, allowing him to easily monitor Max's health, schedule and receive reminders for appointments, vaccinations, and regular exercise routines, and even get advice on Max's diet and care needs. The app should allow Alex to keep track of Max's medical history, monitor his exercise habits, and get actionable insights on how to improve his pet's well-being.

Scenario 6: Student Study and Time Management App

Lisa is a busy college student balancing her academic responsibilities, part-time job, and social life. She often finds herself overwhelmed by the sheer volume of tasks, assignments, and deadlines, making it difficult to stay organized and focused. Despite her best efforts, she often misses deadlines and struggles to prioritize what's most important. Lisa feels that she needs a better way to manage her time, set specific goals, and track her progress toward achieving both academic and personal milestones. She wants an app that helps her break down her tasks, set clear study goals, and prioritize her daily activities. The app should help Lisa visualize her workload, track her progress, and ensure she maintains a healthy balance between studying, working, and enjoying her social life.

Scenario 7: Smart Travel Planning Assistant

Helen and her partner have been dreaming about a European vacation for months. However, as they begin planning, they are overwhelmed by the sheer volume of details they need to manage—flights, accommodations, daily activities, meals, local transport, and budgeting. There are so many options for each aspect of the trip, and they are unsure how to organize everything in a way that's easy to follow during the trip. They want an app that can act as a travel assistant to store all booking details in one place. Additionally, the app should allow them to track their expenses during the trip, create a consolidated itinerary, and even send them reminders for upcoming activities or transport options.

Scenario 8: Recipe Tracking App

Peter is an avid cook who loves experimenting with new recipes in the kitchen. While he enjoys trying new dishes, he often struggles to keep track of his culinary creations and notes for future reference. He wants an app that allows him to input and modify recipes, track his cooking history, and share his creations with others. Additionally, Peter has friends who have a few dietary preferences and/or food allergies, so the app should let him filter recipes based on dietary restrictions, such as gluten-free, vegan, or nut-free, and suggest recipes that match his criteria. The app should also allow him to save favorite recipes and organize them in a way that's easy to navigate.

Scenario 9: Home Inventory and Organisation App

Gavin runs a busy household with his spouse and children. With multiple family members and various household items constantly moving around, he often forgets where he put important items like his children's toys, tools for home repairs, seasonal decorations, or important documents. This leads to stress and frustration, as he spends too much time looking for misplaced items. Gavin wants an app that can help him catalog and organize his household items, track their location, and provide reminders when it's time to reorganize or declutter. The app should allow him to create categories for different types of items (e.g., toys, kitchen supplies, tools, seasonal decorations), assign specific locations for them, and set alerts to remind him when it's time to reassess the inventory or reorganize certain areas of the house.

Scenario 10: Personal Finance Tracker and Budgeting App

Megan and her partner have struggled with managing their finances for a while. Despite earning a decent income, they often find themselves overspending on things they didn't plan for and don't have a clear picture of where their money is going each month. They also want to save more for important life goals, such as buying a house, going on a family vacation, and retirement. The app they need should help them track their income and expenses, set up monthly budgets, and give them insights into their spending habits. Additionally, it should offer goal-setting features for savings, provide reminders for upcoming bills, and suggest ways to cut unnecessary expenses based on their spending patterns.