IMY 310 Project
Phase 1 – Project Plan

Assignment Brief

The semester project requires you, as a group, to choose one of the given topics (see list from the Introduction lecture) and **create a mobile app that provides a good user-experience**. Throughout the semester, you are required to provide details of how to make things user-friendly and intuitive. Simply stating that it will be user-friendly and intuitive will not reward you any marks. You will learn the concepts, terminology, and practices throughout the semester to allow you to discuss in detail what aspects of a design will result in something that is user-friendly and intuitive.

To do this, you must consider what your chosen product is trying to achieve, to which audience it caters, how the audience interacts with the product, and how this user experience can be improved.

Important Note

It is important to understand at this point that your chosen topic will be redesigned as a digital mock-up later in the semester, so do not choose an application too large or complex, because while aspects of the digital mock-up can be hard-coded, the more core functionality your product has, the more you will have to "fake".

At the same time, be mindful that your chosen topic is not too simple to redesign. This is largely up to the group's discretion. However, if the lecturer deems that the project is too simple, groups will have to resubmit their project plans until the project is acceptable in scope. These resubmitted project plans will not be remarked and having to redo them will take development time away from the subsequent project-based assignment.

If you are unsure about the scope of your project, *please arrange a consultation session with the lecturer well before hand-in* to make sure you are on the right track.

No monetizing decisions

As a mobile application designer/developer you have no authority to make any decisions that would affect the business model of the company associated with the mobile application. This includes things like promotions, discounts, centralising payment for service providers, etc.

For example: if you had to build a load shedding app, you cannot give discounts on the electricity bill.

Instructions

To complete this assignment, describe the following aspects of your project. Make sure to use the correct headings for each section.

1. **Cover Page:** Use the provided cover page
    a. Make sure all fields (e.g. Group name) are filled in correctly
    b. The marks table must be included.
    c. "Personalising" is allowed if all fields are still present, the written work is clearly legible, and the positioning is like the original.

2. **Needs Identification (10 marks):** Every application has a purpose. Some may be simply to inform an audience about a service, whereas other products allow people to sign up for a service, interact with these services etc. What is your product meant to do?
   Think of it this way: You are designing a new app. But the topic behind the app is not new. E.g., the load shedding app: there are multiple apps for it out there. But all of them have flaws (no app is perfect). So, what you need to do is investigate how the various existing apps fall short of their purpose. In chapter 1 we discuss the importance of learning from good and bad design. Apply the same logic to your project across all apps that serve the same purpose.

   In doing the needs identification, describe your topic's problem space (page 41-43) **[5]**. Approach the problem space with the topic in mind, not just one specific app. As a whole, discuss what the problem is that make users need to use such a product. Additionally, explain why existing solutions does not aptly serve the users' needs **[5]**.

   For example: Look at the idea behind load shedding apps. Without even looking at issues with existing apps, what is the issue that causes a need that requires a solution? The problem space is that sometimes there are scheduled power outages in South Africa. The need is that users want to know when this will happen. And therefore, the main idea is to be informed of the time that power outages will occur in certain areas. However, this does not identify a clear goal. The reasoning that drives the need for a loadshedding app does not stop there. Why do users need to be informed of these times? Because users want the ability to plan around these times so that their lives will minimally be affected by these power outages. That is the ultimate goal of load shedding apps.
   Again, without even looking at any specific existing app, load shedding apps do not provide solutions that fully satisfies user's needs for planning. Current solutions are just glorified schedules with a search, filters, and alerts. A lot more can be added to it such as:
   - Reminders to do certain chores at home before or after power outages (e.g., laundry, cooking).
   - Reminders to charge electronic devices (e.g., laptops, phones, mobile consoles, e-readers, desk lamps, torches, restock candles/matches/lighters).
   - Suggestions to rework the daily routine so that activities do not require electricity to be done during power outages (e.g., go exercise outdoors during the day instead of the usual time and schedule working/studying when the power is back).
   - Suggest printing out sections of work/study material so that work can be done without electricity.

- Suggest activities that do not require electricity (reading, exercising).
- Areas relating to travelling (e.g., driving) can be input to the app so that it can suggest alternative driving routes to avoid traffic caused by power outages.

Once you have considered all these issues (with the general idea), then you can begin to look at existing apps and see what other issues are specific to various existing apps.

3. **User Identification (20 marks):** Identify the user base of your product and describe it **[8]**. The user base is collectively the various types of users whose needs would be satisfied when using the chosen application. Because your product already exists, it is likely that the intended target audience is discussed by the developers. Use this as a starting point.

   Avoid splitting your users into a hierarchy manner that divides users according to knowledge and experience of the app itself (e.g. Novice user, general user, super/power user). Failure to do so will result in **no marks for the following 12 marks**. Focus on accommodating users looking that would want the app for personal (singular) usage and not for managing a group of people. It is possible that users can use the app in a professional context as a personal choice, but it cannot be something that a company would enforce employees to use. This means that **no user groups** should be **identified as a company** (e.g., wholesalers, traders, entrepreneurs). Failure to do so will result in **forfeited marks**.

   Once your general user base has been described, you must identify and describe three different user groups by explaining how they differ from the other user groups (who they are) **[6]**. Discuss how each user group uses your product (what they do) **[6]**.

   For example: an application may be used by people who watch videos on a platform (e.g., YouTube). There is a type of user who uses it as a means of learning (e.g., tutorials for cooking). Another type of user may watch videos for leisure (e.g., watching music videos). Yet another type of user would watch videos to stay informed about a specific topic (e.g., reviews for a new phone). These user groups have different specialised needs.

4. **User Needs (10 marks):** You have now identified what your product needs to do, who your user base is and how different users want to use your product.

   Based on this, describe at least four things your product needs to do to satisfy its purpose for your general user base (all three user groups that were identified in point 3 must be able to do these things) **[4]**. Additionally, for each user group you discussed earlier, discuss two specific needs for each user group that you have identified **[3x2=6].**

   Note: You will not be awarded marks if you list any basic functions as a user need (e.g., in YouTube videos should obviously be able to play, pause, skip, mute, and go full screen).

   Continuing with the video watching example: it would be handy for users to generally be able to see recommended videos of a similar topic, subscribe to a channel to see future content, comment on videos, and search for videos. Learners would want a more interactive video to easily be able to follow a tutorial step by step and some way to clearly see if they

have all the ingredients/tools (some sort of checklist). People looking to be entertained would probably be interested in a list of contributing artists/actors/performers that could be linked to the information page of the performer or similar performers. People who want to stay informed could want a comparison of similar products to better understand whether a newer product is necessarily better.

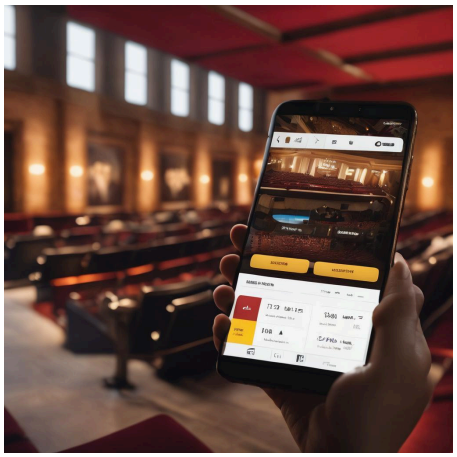
When you do the design, the app should not explicitly separate how each user interacts with the product. Types of users can be interchangeable; the user should not feel limited to only being one specific type of user. For example, a user who originally was watching music videos may suddenly want to learn how to cook a tasty meal.

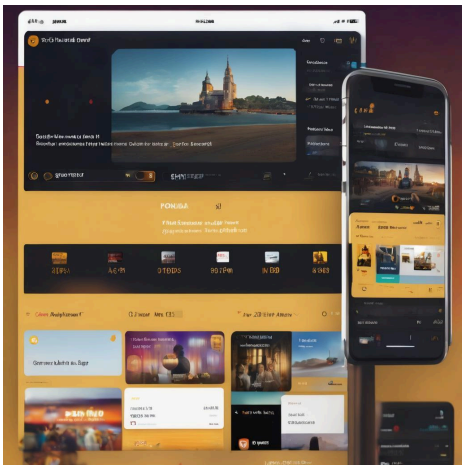
5. **Conceptual Design (10 marks):** Identify at least two real people who fall under your user identification criteria and ask them to describe how they think the product works **[2]**. Keep these descriptions in written/typed out form and attach it to the project plan submission. [**Hint:** Do not attempt to correct them. The point of this exercise is for you to understand how your users think. There are no "correct" answers.]

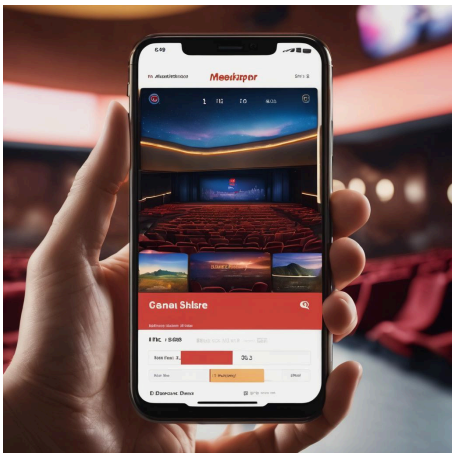
   From these two descriptions that you have created use these as prompts in an AI image generator to explore the integration of AI image generators in the design process of mobile applications. Utilize AI tools to generate images of your descriptions and critically analyze the design concepts, identifying both positive aspects and potential pitfalls.

   1. AI Image Generation**[2]**:
      - Utilize an AI image generator tool to create visual representations of the descriptions. There are several online tools available that can generate images based on textual input. e.g., ChatGPT, Stable Diffusion, Adobe Firefly, Gencraft.
      - Please include these images in your report to support your arguments for the following sections.
   2. Bad Design Concepts**[3]**:
      - Clearly articulate and elaborate on any bad design concepts observed in the generated images. Discuss how these aspects may negatively impact user experience and offer potential solutions or improvements.
   3. Inspiration from AI Images**[3]**:
      - Despite potential shortcomings, you should also explore whether the AI-generated images inspire new design ideas. Discuss any innovative or unexpected elements that could be integrated into the app concept if there are any.

Here are examples of a cinema booking app that was generated using AI:







Total: 50 marks

Submission

Submit a digital copy of your assignment via ClickUP as a PDF with the file name **GroupName_IMY310_ProjectPlan.pdf** where **GroupName** is your group's name. This is to be done before the deadline as indicated on ClickUP. Only one group member need upload the document.

Plagiarism will not be tolerated, and any group suspected of plagiarism will receive 0 for this assignment.