



# **COMP90055 Computing Project**

## **Project Proposal**

Presentation Assistant App Development  
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## 1. Introduction

Presentations are widely used in working and studying. But people often have to stand in front of the computer to control them with a mouse or keyboard. We want to develop a smart watch application that helps the presenter to manage presentations, including helping to control the slides, showing quick notes, setting time reminders and so on. Comparing with traditional computer software, this watch's application is portable and convenient.

There are some existed presentation assistant software. For instance, the 'Unified Remote' is a remote control application that is available for Android, iPhone, and Windows Phone. It turns the device into a Wi-Fi or Bluetooth universal remote control for Windows PC, Mac and Linux.

In addition, 'Wrist Presenter' is another mobile app that lets people view and control presentations wirelessly with their smart watch. It is available both in App Store and Google play. Initially, we load presentations using iTunes USB File Sharing or just connecting to Google Drive to access our presentations. Then, the presentation can be viewed on a projector by mirroring our iPhone via Airplay or with a Chrome-cast on Android.

Comparing with the existing applications in the market, our application has more features such as timeline, key points reminder and time alert. We aim to develop a more convenient and unique smart watch/phone application to assist user in their presentation. We will present our unique features as below.

## 2. Features

Here are some features and functionality they we are going to implement in the project. This includes in different platform including watch, phone and computer.

*Key Points Reminder (Watch & Phone):* On the watch, we simply shows the key points of each power point slide. The key points could be manually entered on the phone or on the watch.

*Time alert (Watch & Phone):* Users are able to trigger the alarm with the time they want. The notification method could be either sound or vibration. For example, the user might set vibration after 5 minutes to remind them what time they have used.

*Timeline (Watch & Phone):* This shows the timeline flow of the presentation on the watch. Users could know what are the upcoming key points and slides.

*Connection between Watch and Phone (Watch & Phone):* This allows communication between the watch and the phone. Ideally the phone would have all the features of the watch.

*Create/Control PowerPoint (Watch & Phone):* We want to create the PowerPoint slides on the phone. Users are also allowed to control PowerPoint slides on their phone or watch. For example, the user could swap the pages during the PowerPoint presentation.

*Control volume (Watch):* There might be some videos in some of the presentation. User could control the volume of the computer directly on their watch.

*Enter or exit full screen mode (Watch):* Users are allowed to enter or exit full screen mode of the power point presentation by clicking a button on the watch

*Timeline sharing (Phone):* Users could share the timeline they created with other users. This will help the group presentation as group members may want the same timeline.

*Connection between external devices and phone (Phone & External devices):* This allows communication between the phone and the external devices (e.g. Chromecast, HDMI adapter or computer) to allow the features of controlling PowerPoint.

Features	Priority (1 = most important)	Time required (Days)
Key Points Reminder (Watch):	2	5-7
Time alert (Watch)	2	5-7
Timeline (Watch)	3	5-7
Connection to phone (Watch)	1	7-14
Control PowerPoint (Watch)	2	7-14
Control volume (Watch)	4	3-5
Enter or exit full screen mode (Watch)	5	3-5
Key Points Reminder (Phone)	2	5-7
Timeline (Phone)	3	5-7
Timeline sharing (Phone)	3	7
Connection to external devices (Phone)	1	7-14
Create/Control PowerPoint (Phone)	2	7-14
Connection between external devices and phone (External devices)	1	7-14

Table 1: Features list

### 3. Project Plan

Our team plans to divide the project into three phases.

**Phase 1:** This phase is mainly the initial phase of the project. The main tasks include understanding and learning the knowledge and skills of Android development. The team members will exchange discussions and establish the basic framework of the project to determine the developing tools, programming languages, data structures and databases used to develop the software system.

**Phase 2:** According to the division of labor, each member will complete their own development functions individually. According to the project plan to allocate time, and specify the development tasks of the Android system.

**Phase 3:** Team members will test each other's specific functions and improve the system. Furthermore, we will fix bugs and optimize the whole system. Finally complete the project report and prepare the presentation.

In response to the above three stages, after discussion in the group, we decided to refine the specific division of labor as follows:

Member1: Responsible for developing Key Points Reminder, Time alert, Control volume, Timeline, Connection between devices and phone functions.

Member2: Responsible for developing Timeline, Connection to phone, Control PowerPoint, Key Points Reminder functions.

Member3: Responsible for developing Enter or exit full screen mode, Timeline sharing, Connection to computer, Create/Control PowerPoint functions.

### 4. Conclusion

This presentation assistant application, which has several features in both smart watch and mobile phone which help presenter manage presentations conveniently and portably. Comparing with current applications, our product has more features and needed less external hardware. In the next two months, our team aims to complete the features and do some additional and challenging features if time is allowed.