# OverView

## Topic

Our project is holographic lens which is advanced holographic technology can bring us into 3D virtual world. We can read message and book in the air, play games with friend in the real world. 3D object can bring new gaming experiences.

As the holographic lens work then we can shrink it into contact, so we can use apps anywhere and anytime in convenience and replace mobile phone and tablet even computer is possible. People can also put any message where it needs to be, so the efficiency of work will be significantly improved.

## Motivation

The motivation of this project is quite simple, we love playing game and many people have ever imagined to a main character in other story and dreamed about those science fictions can become true and most of all, the world is evolving every single moment, considering virtuality is becoming more and more popular, we will be glad to be part of it. this project might become a symbol to future technology.

## Landscape

The similar technology existed is either just a display device or a working progress. Microsoft are working on the similar project but not yet release which mean there is an empty market available and major difference between our project and Microsoft’s is we are trying to build a holographic display in contact size and a small portable device to carry so that it cannot only display 3D message and also execute any application.

# Aim

The goal of this project is able to allow people wear just contacts and a small portable device to replace smart phone that exist right now, it will do everything a smart phone can do but in 3D dimension. Display messages, video call, applications and games will be the main factions of our project.

The minimise goal of our project is can play 3D content in the real world, read message in the air and put virtual tags where it is necessary.

# Plans and Progress

Holographic lens will bring virtual object into real world, NPC will be everywhere on the street to introduce shops and virtual sign replacing real sign. People will be able to see advertise in the air and have a choice not to, virtual guide NPC will help lost people to find the path to where they need to be.

# Roles

Project leader; software developers; hardware developers;3D user interface designers;

# Scope and Limits

The priority is to make holographic display possible, to make reading message in the air possible.

The first thing we need to finish is simple display words in the air.

# Tools and Technologies

A programming language is needed. Such as Java and python.

Materials that allow to record and display holographic in any circumstances.

# Testing

Testing this project require no user at early stage. It first need to display words and graphic in the air, then we can start to program some simple applications such as reading application, map or a simple game to test its functionality.   
Timeframe

# Risks

The major risk for this project is we cannot get it done due to this is a project that didn’t exist before, so there is a very high chance we will not have enough knowledges or fund to get this project done. Especially we are just students and a whole new idea requires a huge amount of money to experience.

# Group processes and communications

In my opinion, the best communication way is to work in a same lab together, but it is clearly not going to happen, so we best communicate through WeChat or massager. and have a face to face meeting to discuss multiple problems each met once a week at any quite place or have this meeting whenever necessary. If a group member doesn’t response in any way, first I think we need to be patient because that member might run into some trouble. If the member doesn’t have any good reason but just don’t want to cooperate. We will have to kick the member out.