

## Analyze the game - Clash of Clans

I enjoy play Clash of Clans (COC) a lot, and I think it's addicting game for these reasons:

**1. Engaging and growing interaction:** COC starts with simply building towers to defense invaders, which is really easy to pick up and form a mental model of the interaction of the game. Then it keeps presenting players new elements, like collecting resources, building barracks and training troops, and a lot of more will be mentioned later. The carefully scripted expansion of user mental model and complexity of game interaction is very addictive to players.

**Reference:** M1, M2 from Mauro-WhyAngryBirdsIsSoSuccessful.

**2. Skillfully designed rewarding system:** Firstly, COC's rewarding is well-balanced. Initial leveling ups are easy but with less rewards, gradually it becomes more difficult and time consuming, but also more rewarding, which is crucial to retain and engage players. Secondly, COC has rewarding system mixing up variable ratio (collecting resources to level up) and variable interval (looting resources to level up) schedule to stimulate responses of players.

**Reference:** C3, C7 from Conrad-WhyVideoGamesAreSoAddictive.

**3. Teamwork and social interactions:** One of the most important feature of COC is that players can join a clan and take part in the battles with other clans. During this process, a player will teamwork with other players, communicate with other players and support each other with resources or troops. Therefore players make friends and establish social bindings in the game, which is very addictive and engaging.

**Reference:** C2, C4, C8 from Conrad-WhyVideoGamesAreSoAddictive.

## My New Concept - Stock Discussion App

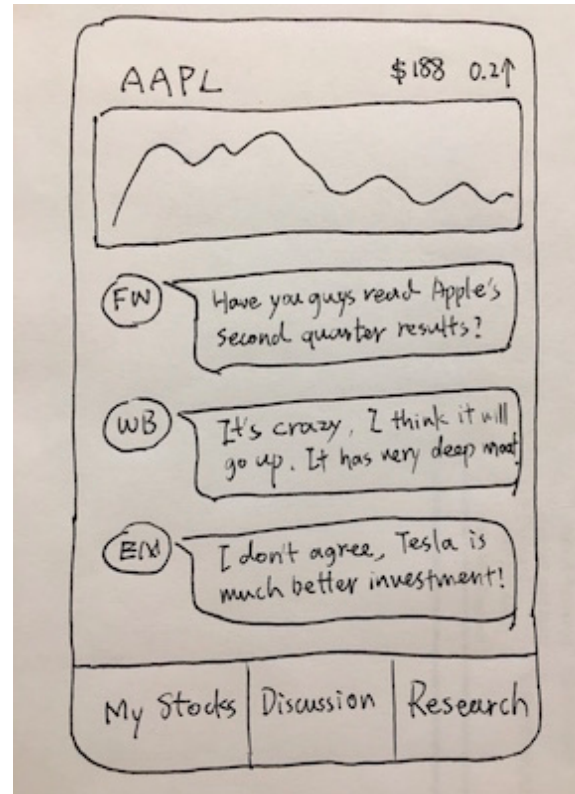
I enjoy doing stock investment in my free time. My proposal is to apply what I learned from COC and create an app for stock investors to discuss and research stocks.

The idea is that an user can bookmark stocks he's interested in and discuss with other users. Right is a typical stock discussion screenshot in my mind. The header part has stock information, and the body shows that investors interested in the stock is chatting about this stock.

I think this stock discussion app will be successful because:

**1. Simple to start:** We are familiar with facebook-style online commenting and chatting under a certain image or post.

**2. Social interaction:** As investors discuss the same stock, they exchange ideas and knowledges. Overtime, they will make friends or follow other investors, which makes it difficult to stop using the app.



# Generating Many Ideas

## Dietary Assessment

**1. Healthy meal suggestion:** A lot of times, I'm not sure what to eat and end up to eat some unhealthy food. The idea of this app is it gives you a list of recommended healthy meals for you to choose from when you have no idea what to eat. It also shows how many calories the meal contains and what are good nutritions of the meal provides. Even further, it teaches you how to cook a healthy meal you just selected, or suggests you where is the nearest place you can buy it. This app will help to significantly decrease the chances of you eating junk food.

**2. Calorie Check:** A lot of times, I don't how much calories does my food contains and therefore end up eat a lot high-calorie food and gain weight. The idea of this app is that it uses the camera of the phone to scan the food presented, does vision recognition to figure out what the food is and calculates how much calories it contains. This app will let you know how many calories you are about to take in and alert you if it's too much for your body.

**3. Calorie Alarm:** A lot of times, I just don't remember how much calories I have taken from my food today and end up eat too much and gain weight. The idea of this app is that you can set a target calorie number for the day, the week or the month. Every time you eat food, you input what and how much food you are having, the app will calculate the number of calories it has, and checks if it goes over your daily, weekly or monthly limit. If the total number of calories you've taken is over the limit, the app will alert to you and explain why it's a bad thing for you.

# Generating Many Ideas

## Sleep Quality

**1. Sleep Environment Check:** Sometimes my sleep quality is affected by a bad sleep environment. The idea of this app is that it will check the sleep environment and give us suggestions how to make it better to improvement your sleep quality. It need to employ some sensors of the phone to monitor the light level, temperature, air quality, air flow and noise level. If some factors are not ideal for your sleep, the app will give users alert and suggestions on how to improve it next day.

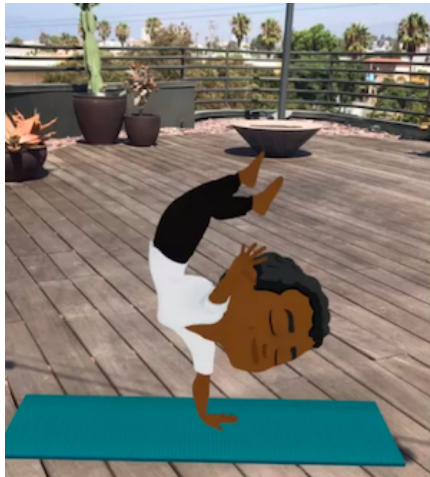
**2. Sleep quality monitor:** Sometimes I feel tired even when I just wake up, this might be caused by low quality sleep and the first step of improvement is to know your sleep quality. The idea is to monitor user's body situation with the help of a device like apple watch or android watch. During an user's sleep in the night, the app will monitor the user's heart rate, blood pressure and arm movements, analyze the quality of the user's sleep in the night, and give an report next day. If an user's low quality sleep is repeated happening, the app will alert the user to see a doctor.

**3. Sleep time story:** Sometimes I cannot go to sleep easily because I just finished my work or study, I cannot stop thinking of all kinds of things from work or school. The idea of this app is let the user listen to some stories and distracted them from other things, so that they can fall asleep peacefully. The stories are told in a gentle voice in a slow speed, and maybe with some soft music, just like we tell bedtime stories to our kids.

## Generating Many Ideas

### Killer Exergame:

**1. Virtual Cartoon Dance Class:** Kids love to dance and especially in a cartoon dance class. The idea of this app is to use AR technology to create virtual cartoon characters and embed them with the real environment using the camera of the phone to create virtual dance classes. The effect is some like below:



**2. Exercise hero:** an engaging game is always using a carefully designed challenge-reward system, so I want to apply this to the exercise game. The user has a virtual character in the game, which will be affected by the user's real exercise. The user's body movements, heart rates and other exercise data will be collected through different sensors of the phone. If the user does more exercise like jumping, walking, running, and burn more calories, the virtual character will get more rewards and level up, which will grow stronger and look better in the game to simulate the player to do more exercise.

**3. Treasure hunt game:** kids loving playing treasure hunt game, which we can merge into a mobile game. Using AR technology, the game hides treasures randomly in a park or playground, and the users in the game can team up and compete with each other to collect all the treasures. To win this game, the players need to teamwork, run around, search a lot of places and do a lot of exercise with a lot of fun.