# meetZam

**Team 4 - Product Backlog**

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## Problem Statement

Has anyone ever found any difficulty finding the correct movie and the ideal company to watch the movie with? Oftentimes, just the process of finding the right movie and organizing it with the right people can be a time-consuming task.

We are envisioning a mobile application which allows people to find other people to go to a movie together. Users can select one or more movies that they want to watch and we will match them with a group of people with the same interests as them.

## Background Info

### Targeted Users

Watching a movie alone can be a frustrating experience when there are no friends available to watch it together. Even cooperating a group of friends to watch a movie together is usually a tedious task and sometimes mixed with misunderstandings. Our target users are those who want a easy and one stop solution to find movies of their interest, schedule time to watch movie with friends, and find movie buddies from strangers.

### Similar Platforms

There are a couple of movie apps currently available on the App Store, Movies by Flixster and Fandango Movies. They provide similar functionalities such as showtime information, commenting and reviewing, online ticketing and detailed movie information.

### Limitations

While both of them have proven to be useful, they both lack the ability of helping people finding their movie-buddies. We believe one of major factor that stops people from going to the movie theater is the simple fact that they can't find people to go with in a timely manner.

We aim to address such problem by creating a mobile application that not only providing showtime, commenting and reviewing, but also a matching mechanism that groups people based on what movie they wanted to watch.

**Functional Requirements**

1. As a user, I want to create an account
2. As a user, I want to have multiple signup/login options
3. As a user, I want to know what movies are out this week
4. As a user, I want to know the popularity of the movies
5. As a user, I want to filter movies according to category
6. As a user, I want to check posters and introductions of a movie
7. As a user, I want to have a friend list
8. As a user, I want to invite my friends to watch movies
9. As a user, I want to receive notification when my friends send me movie invitations
10. As a user, I want to search and add friends by their usernames
11. As a user, I want to have the option of adding my friends on social media to my friendlist on meetZam
12. As a user, I want to see who (friends/strangers) are still finding a movie buddy for the movie I want to watch
13. As a user, I want to know what movies my friends want to watch
14. As a developer, I would like to add users who agree to watch movies together to a group chat with 3-10 people
15. As a user, I want to mark the movies I want to watch and wait for others to join me
16. As a user, I want to receive notification when I am matched and added to a group chat.
17. As a user, after being added to a stranger group chat, I may want to quit the group chat if I changed my mind
18. As a user, I want to chat with friends or strangers about specific plans of how we are going to watch the movie
19. As a user, I may want to choose to watch movies with strangers rather than alone when my friends are not available
20. As a user, I would like to comment on the movies I have watched
21. As a user, I would like to see other public comments on the movies
22. As a user, I want to rate the movies I have watched
23. As a user, I want to know what movies my friends have watched
24. As a user, I want to filter movies comments to show only my friends' comments

25. As a user, I want to see short reviews of the movies that I want to watch

26. As a user, I want to create a personal movie list that saves the movies I liked, which can be shared to the public or my friends

27. As a user, I want to know what movies will be out in the next few weeks

28. As a user, I want to rate the strangers that I went to the movie with

29. As a user, I want to check another user's meetZam credit score, which indicates a user's manner on meetZam application and post-matching behaviors

30. As a user, I want to report another user if he or she demonstrated inappropriate behaviors, and their meetZam credit score will be deducted


## Non-Functional Requirements

### Architecture

We've decided to develop the application on iOS platform targeting iPhone users under several considerations, such as operating system performance and stability, security, and platform popularity. One highlight of our application architecture is that we're building a No-Server backend, or so-called Serverless Architecture.

The idea is that we will break our backend functionalities and logics into many small pieces that each piece serve as an individual cloud-based micro-service that perform some simple task. This approach solves many problem arises from a traditional server-based architecture such as network and server management, compatibility and dependency management, scalability problems, and inefficient use of resources. In addition, since many application backends share common functionalities, break them into individual micro-services increased code reusability significantly.

### Framework and Tools

We will utilize Serverless Framework to help configure, provision and deploy Lambda functions onto AWS services. These Lambda functions responds to events, and can be triggered by our mobile app using AWS Mobile SDK or HTTP(s) requests via a custom API hosted on AWS API Gateway. Once triggered, the Lambda functions will perform tasks suitable to support the functional needs of our application. Such as data processing, user authentication, communicate with database, file system, and external APIs.

Client side logics will be written in Swift and uses Xcode as primary development environment. Lambda functions will be written in JavaScript using Node.js 4.3 runtime. User authentication

will support 3rd-party authentication providers such as Facebook, Google, and Amazon. Support in-app push notification using Amazon Pinpoint, email notification using AWS SNS.

**Security**

One advantage of building backend on a matured platform like AWS is security. AWS services come with several security feathers out of the box. AWS IAM is a permission management service that enable us to assign appropriate permissions to different user groups, and admin groups to make sure no surprise will hit our face from the ground up. In addition, user authentication and other user activities will be filtered, monitored, and reported through Amazon Cognito so that things could fly smoothly and securely.

**Usability**

Our users are very important to us, because everything eventually comes down to if users like the product or not. Thus user experience will be a driven factor of our UI/UX design process. We try to make things easy for our users from the very beginning by allowing only 3rd-party authentication to free our users from memorizing yet another password and the frustrating process of entering the password. Once logged in, it is easy to navigate through, and understand the functionality of our app via a thoughtful, intuitive user interface.

In addition, we require essentially no input from our users to minimize the initial setup process so that a new user can start to enjoy the exciting service we aimed to provide right away. Furthermore, by utilize both in-app and email notification mechanism, we can provide our users with their matching status in real time to make sure everyone get notified as soon as we matched our user with a group. Combining with in-app group chat room, our users will be able to have more detailed discussion and planning with their new movie buddies.

**Protecting Our Users**

We have reimagined the reviewing and commenting process because we understand the importance and how review and comment can be abused by hostile users which leads to significantly reduction in the experience for other users. And finally, to make sure our users have enjoyable experiences, we think beyond the scope of just the application by providing a user rating mechanism as a method encouraging proper social conduct during group movie sessions and adding a layer of safety for our users.