LookVie Design Specification

Team LookVie 김명선, 송민준, 이의섭, 유진, 조범준, 한승남

1. Architecture

A detailed definition of the system's software components.

- the major **modules** and their functionality

Searching module - Search movie (Maybe show the Box Office ranking).

Naver Map API - Search for cinemas nearby the user and calculate the distance between the user and the cinema.

Cinema Recommendation module - Compares the arrival time to each cinemas nearby and the screening time of each cinemas nearby to get the best solution(fastest way to watch the movie).

CGV Web Scraping data - Data of CGV cinemas and its screening time schedule. And scraps each theaters seat map.

- the **interfaces** between modules

Searching module - Naver Map API

- -When getting the search value get the location of the user by the gps of the phone
- -Search for the cinemas nearby the user

Naver Map API - Cinema Recommendation module

-Gives the arrival time of each cinemas nearby to the CR module

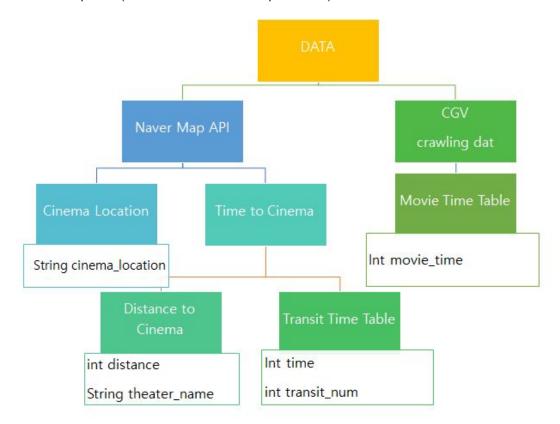
Naver Map API - CGV data - Cinema Recommendation module

- -Gives the information of nearby CGV cinemas to the CGV Web Scraping data
- -Find the screening time of the nearby cinemas and send it to CR module

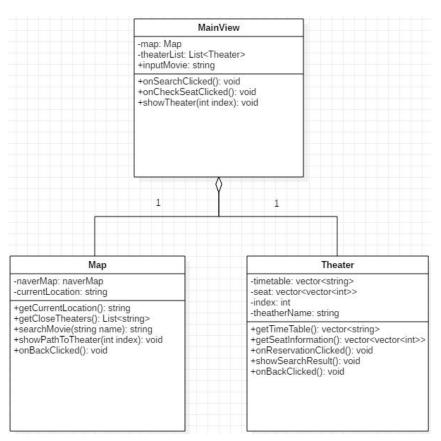
Cinema Recommendation module - CGV data

-After getting the best cinema to watch, let the CGV data find that cinema and give the seat map to the user

- data description (database schema if possible)

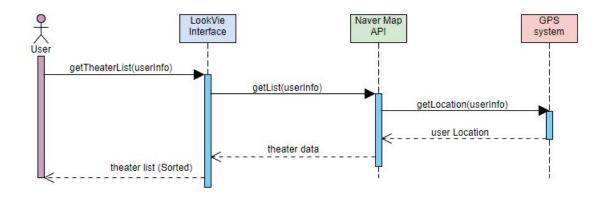


- design alternatives

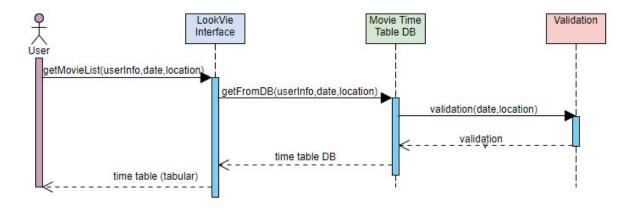


- assumptions

a. search movie list via Naver Map API



b. show close theater list from DB



2. Process

- Risk assessment
 - Database update issue

We plan to save data to a device(local). Since this application should have the most recent database, we will update this application every week.

 Crash with certain Android versions
Since we are mainly going to design with the Pie (API 28) version, there might be clash with older versions of Android API.

- Project schedule

	WEEK										
	1	2	3	4	5	6	7	8	9	10	11
Design proposals				MIDTERM	Design Specifi cation						FINAL DEMO
Design DB Schema											
Create crawling model / Scrape data											
Implement basic application features											
UI Design											
Implement map algorithm											
Implement additional function											
Test and prepare final demo								A L P H A			

- Team structure

- a. App Development / Map API & Algorithm Myeongseon Kim, Beomjun Cho
- b. Crawling DataMinjoon Song, Seungnam Han
- c. DB Management Euisup Lee, Minjoon Song
- d. UI Design Yujin, Euisup Lee
- e. Document

Seungnam Han, All

- Test plan
 - -Test by using Android Studio test tools such as
 - AndroidJUnitRunner: Android test runner based on JUnit. Test the methods, classes, components of the code
 - Espresso: UI Testing Framework, good for testing UI in the app
- Documentation plan
 - Will be uploaded to our github : https://github.com/lookvie
 - Documents will contain sources of reuse softwares
 - Bugs occurred during development phase
- Coding style guidelines
 - -We will write source code with strict rules for contributing Java code to the Android Open Source Project
 - -https://source.android.com/setup/contribute/code-style#javatests-style-rules