HallyuGo: A Guide to Discover and Visit K-Culture Hotspots

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Abstract

HallyuGo is an innovative mobile application designed to enhance the experience of Korean culture enthusiasts and tourists. Leveraging the growing global popularity of Korean pop culture, known as Hallyu or the Korean Wave, this project aims to create a comprehensive platform for discovering and exploring locations associated with K-dramas, K-pop, Korean movies, and novels. The application features an interactive map, detailed information about cultural hotspots, and a community-driven content sharing system. By integrating location-based services, user-generated content, and curated cultural information, HallyuGo addresses the challenge of finding up-to-date and relevant information about Hallyu-related sites. This paper outlines the motivation, objectives, and technical implementation of HallyuGo, highlighting its potential to facilitate cultural tourism, enhance fan experiences, and contribute to the broader dissemination of Korean culture worldwide.

Keywords: K-drama, K-movie, K-pop, Proof shot, Cultural tourism, Mobile application, Interactive map

1   Introduction

The Korean Wave or Hallyu is a term that refers to the growing popularity of Korean culture around the world. As a result of this phenomenon, South Korea has experienced a significant increase in visitors in the last decade, many of them attracted by the country's pop culture. Many of these tourists visit South Korea with the specific intent of touring sites where their favorite K-pop music video or K-drama was shot. Moreover, foreign travelers are not the only people seeking out these locations. Korean people, especially younger generations, also tend to be interested in pop culture and, subsequently, in visiting these places.

However, finding up-to-date information can be challenging. To address this issues, HallyuGo is a project that aims to create a website where users can easily find information about relevant sites in South Korea's pop culture, as well as a community where people can engage with each other through their shared interest in Korean pop culture.

2 Motivation and Objective

2.1 Motivation

The surge in popularity of Korean culture around the world since the late 1990s and early 2000s, known as Hallyu or Korean Wave, has turned South Korea into an important part of global pop culture. In the last decade, K-pop acts have become an important presence at global music festivals, and Korean films and dramas are increasingly recognized and awarded at film festivals around the world. As such, there is a growing interest among foreign nationals in visiting South Korea, many of these visitors attracted to specific sites around the country featured in their favorite films, music videos, dramas, etc. Not only that, but visiting these locations is also a popular activity among Korean fans.This represents a significant opportunity for tourism in South Korea, both from foreign travelers, but also domestically.

In spite of this, there is a lack of comprehensive resources that facilitate finding and sharing these locations with other people, with many travellers struggling to find information about these places, which can dissuade travellers or negatively impact their experience in the country. This situation creates the need for a platform that offers relevant information to users, promotes engagement with Korean pop culture and strengthens the community of fans both in and outside of Korea.

2.2 Objective

The primary objective of HallyuGo is to create a user-friendly application that serves as a hub for information about key sites related to South Korean pop culture. This platform will be centered around an interactive map that highlights sites related to K-pop, K-dramas, Korean films, and Korean novels; providing users with relevant information. Additionally, HallyuGo aims to create and grow a community of users interested in Korean pop culture, in order to facilitate tourism in South Korea, and help seize the economic opportunities created by the Korean Wave.

3 Related Work

3.1 Anitabi

Figure 1: Animation Tour Map

Anitabi[1] is an online map for animation tours. Users can search for locations and screenshots of actual landmarks in the animation based on the name of the animation, place name, city name, and other information.
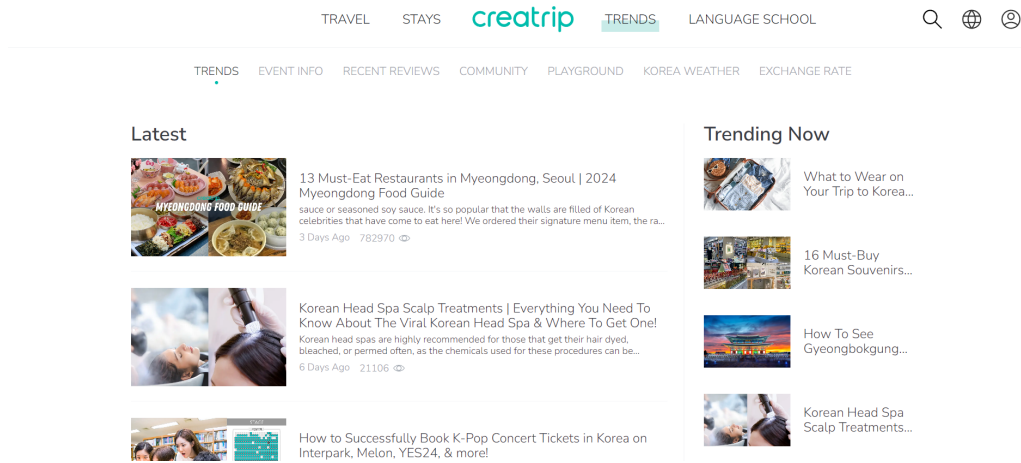
3.2 Creatrip

Figure 2: Korea Trends Information

Creatrip[2] is a platform where foreigners who like Korea can enjoy Korean culture and trends anytime, anywhere. Starting from providing information related to Korea, Creatrip is now growing into a commerce platform where users can enjoy reservations and discounts for travels and shopping. As a result, it has become a global business platform with 1.5 million users per month.
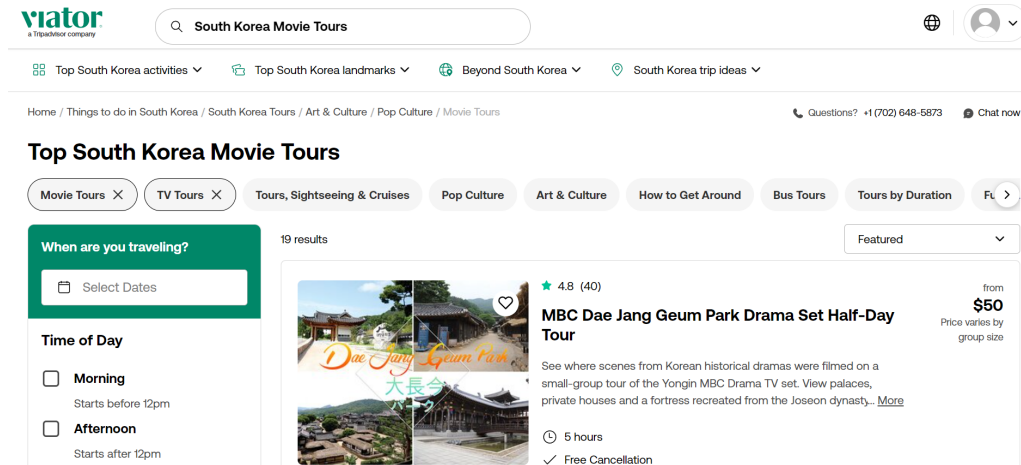
3.3 Viator

Figure 3: Korea Movie Tour Information and Reservation

Viator[3] is an online platform where travelers can book various tours and activities in cities around the world. It help users choose activities that they desire such as sightseeing tours and cultural experiences and make plans. For example, there are various themed tour options, such as "MBC Dae Jang Geum Park Drama Set Half-Day Tour" and "Full Day Tour In The Soop BTS Ver in PyeongChang Filming Location" in Korea. Users can refer to reviews and ratings of other travelers, and easily reserve through various payment options.

4 Problems and Solutions

4.1 Problem statement

In order for interest in Korean culture to continue in the long term, not temporary, services that provide appropriate information and rich experiences including a wide range of cultural contexts must be needed.

However, the related works mentioned earlier do not target Korean culture, or are focused on commerce such as travel product sales rather than providing information and sharing experiences. Moreover, it is difficult to see certain places related to the Korean culture that users want at a glance.

4.2 Overall Features

This service will be provided as a mobile application. UI designs are optimized for iPhone 16 Plus.
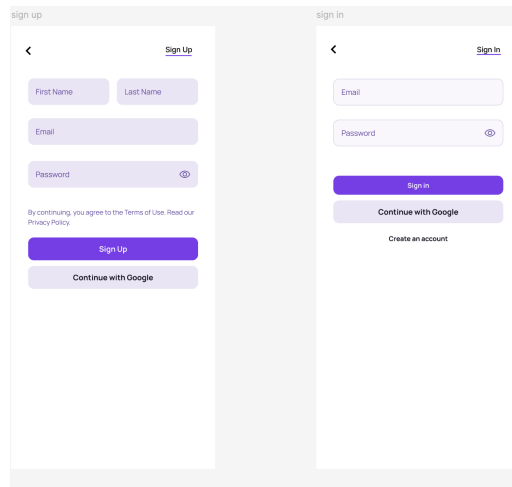
4.2.1 Sign Up / Sign In Page

Figure 4: Sign up / Sign in Page

This pages are offering two methods of user authentication, via email or Google. Error messages are noticeable to help users correct mistakes.

4.2.2 Main Page

The main page is designed to make it easier for users to browse and access various contents. It contains sections: header navigator, carousel, search box, and content card.

- Header: Headers are designed for easy navigation between home page, map page and my page.

- Carousel: The carousel contains app introductions, advertisements, and recommended K-content from admin.

- Content Cards: The main page has categories of K-pop, drama, film, and fiction, and each category shows the two highest rated content cards along with a hashtag. Clicking on the card takes users to the map page.
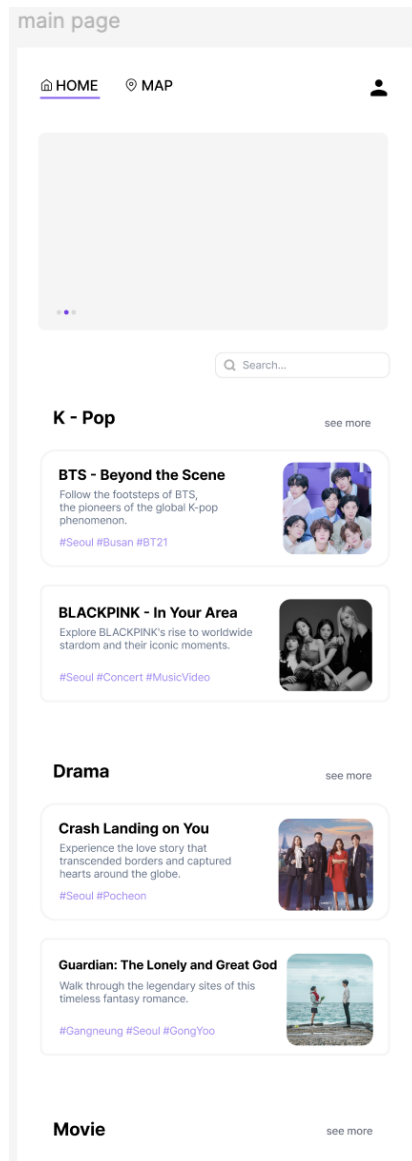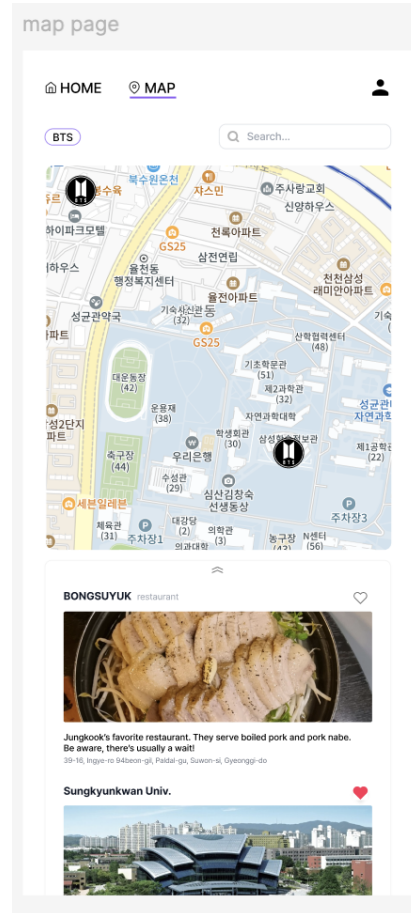
Figure 5: Main Page

Figure 6: Map Page

4.2.3   Map Page

The Map page consisting of headers, badges, search bar, and detail card section.

- Header: The header layout is similar to the layout of the main page, providing a familiar navigation environment.

- Badges: The map visually expresses various cultural locations related to K-pop, K-drama, K-movie, and K-novels. A badge representing a specific content is displayed on the map, allowing users to easily identify points of interest. For example, BTS badges show their music videos, concerts, and the location of their members' recommended restaurants.

- Detail card section: There are cards in this section. The cards contain the details of locations which are indicated with badges on the map. There are brief information concluding the location's name, operating hours.
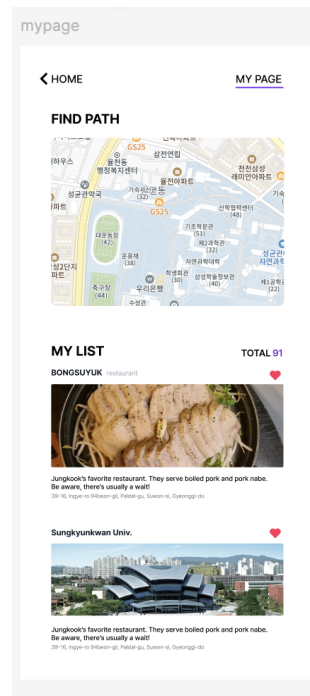
4.3   My Page

Figure 7: My Page Layout

In the My Page section, users can view their favorite content and view 'proof shots'.

- Favorites: Users can view the cards marked as favorites before.

- Mini Map: Cards marked as favorites are visually displayed with badges representing their contents on the map.

- Navigation to Detail Page: Click a card or badge to direct the detail page for that content.

4.3.1   Detail Page

The detail page provides detailed information about a particular location to users. In this page, users can upload 'proof shots' and leave comment of the location.

- Comprehensive Information: This page contains important details such as operating hours, contact information, and location photos.

- Proof Shot: The "Proof Shot" feature allows users to capture and upload photos taken at that location.

- User Comments: Users can leave comments, rate their experiences.

4.4   User Scenarios

4.4.1   Sign up and Sign in Process

- Sign up: During the sign up process, users can choose to sign up with an email address or with a Google. Once the user chooses to register with an email, a verification code will be sent to the users' email. If the user enter this code, then the user can configure the password. If there is a field that is not already complete, an error message will appear and let the user know.

- Sign in: During the sign in process, users can sign in by e-mail or use a Google account. The error messages will be triggered if the user enter with wrong format.

4.4.2 Content Search

Users can use the search bar to search for content. The found location is will be displayed as a badge on the map and user can view the card lists at the bottom of the page.

4.4.3 My Page Features

- Mini Map: The mini map in the My Page section display locations with favorites. User can move to detail page with click the badge.

- Favorite List: User can view all of their favorite locations in a list of cards. The card will be removed from the list when the user toggles the Favorites button to delete it.

- Proof Shot Gallery: User can view all uploaded proof photos. In this section, user can change the visibility settings.

4.4.4 Proof Shot & Stamp

When a user arrives at a location, a proof shot function is available using the GPS function. After taking a proof shot, the stamp for the content is added to the user's collection.

4.5 Map Implementation Using Naver Map API

We plan to use the Naver Map API for the app. Because we try to find the map that provides precise map data within Korea. Also, Naver Map supports English. Language can be set via a script load option using the `language` setting, making it suitable for international use.[4]

4.6 Information Displayed on the Map

Information about the locations marked on the map is divided into three main parts. Each site will be represented by a badge on the map, featuring images from the respective works or artists. Users can either use the search bar to find specific locations or click on the badges displayed on the map to view descriptions of the sites at the bottom.

- **Korean Drama and Movie**: This section presents the filming locations of dramas and movies shot in Korea. Each location will include a brief description of the corresponding drama or movie, accompanied by images from the production as well as actual photographs of the site. Additionally, links to related videos, such as those on YouTube, will be provided.

  Example:

  Queen of Tears - The Hyundai, Yeouido

  Queen of Tears - Hangang View from Dangsan, Hapjeong Subway Station

- **K-pop Filming**: This section highlights the filming locations of K-pop music videos. Like the previous section, it will feature images of the locations as seen in the music videos alongside actual photographs of the places. Additionally, links to the music videos on YouTube will be provided.

Example:

BTS Spring Day - Jumunjin Beach

- **Korean Novel**: This section highlights regions and places featured in Korean novels. Actual images of these locations will be presented alongside excerpts from the novels that describe them. For works set in the past, experiencing both the historical descriptions and the modern advancements of these sites will provide a unique perspective. This approach allows users to appreciate the contrast between the past and present in a meaningful way.

  Example:

  Pachinko - Yeongdo, Busan

4.7 Implementation

4.7.1 Front-end Features

The front-end of the application will be developed using Next.js, Tailwind CSS and UI Component Library. Progressive Web App (PWA), provides features similar to native applications. State libraries uses either Recoil or Zustand.

4.7.2 Back-end Features

The back-end of the application is developed using Spring Boot and MySQL. To implement 'Sign in' and 'Log in', we are planning to use Spring Security. The development is being done in a Docker-Compose environment, and for managing image data within the application, we plan to use AWS S3.

5 Planning in Detail

5.1 Role distribution

The project primarily focuses on app development. The app development is divided into two parts: Back-end development and Front-end development, with each part consisting of two Back-end developers and two Front-end developers. Due to the characteristic of the project, collecting location-related data is crucial, so all team members will be working together.

Name	Role
Daegyo Jung	PM, Back-end, Data collection
Yoojin Lee	Front-end, Data collection
Jisu Kim	Back-end, Data collection
José Antunes	Front-end, Data collection

Table 1: role distribution

5.2 Schedule

Weeks	2 - 3	4 - 5	6 - 7	8 - 9	10 -11	12 - 13	14 - 15
Refinement of Topic	O	O					
UI & UX Design		O	O				
DB Design		O	O				
Back-end Implementation		O	O	O	O	O	
Front-end Implementation		O	O	O	O	O	
Data Collection			O	O	O	O	
Testing and Deployment						O	O

Table 2: development plan

The development plan is structured into four key activities: Back-end implementation, Front-end implementation, Data collection, and Testing and Release. Although this is the planned schedule, we acknowledge that some aspects may change during the project depending on the situation and progress.

References

[1] Anitabi, https://anitabi.cn/map.

[2] Creatrip, https://creatrip.com/en.

[3] Viator, https://www.viator.com/.

[4] Naver Maps, *Naver Maps JavaScript API Documentation*, https://navermaps.github.io/maps.js.ncp/docs/tutorial-Language.html.