Google Map for customizing unique trip

Product mission statement:

Product name: Explore Companion

Product Description: Explore Companion is a mobile application utilizing the Google map to develop product that can give the user a unique experience when they start a new journey to some place. No matter they're a local explorer or an adventurous traveler, they can get their customizing trip plan and personalized experience, leaving every precious memory with them. Explore Companion will enable the users to create interactive and educational virtual tours for various purposes.

Target Audience: Travelers who are going to explore new places.

Key features: Personalized trip planner; weather & ticket booking together before trip; Google maps data integration; 3D environment creation; interactive navigation; export and sharing;

User Story:

The experience of the user can be divided into three parts: before-trip; during- trip; after-trip.

Before-Trip:

Before embarking on their own journey, users can schedule their preferred destinations and activities. Alternatively, they can complete a quick questionnaire, enabling the app to generate tailored trip recommendations. To provide more reliable information to the users, they can enhance their trip planning with augmented reality for a lifelike preview and access real-time user comments and live views of the spots.

With integrated weather data with Google Maps, users can get precise future trip weather forecasts so that they can pack clothing with greater accuracy.

By integrating hotel and ticket bookings together, users can get the personalized recommendations for comfortable accommodations that match with various budgets and preferences.

During-Trip:

With the planner feature, users can choose their destinations and assign them to each day of their itinerary. They can also search on the app to get the nearby bar sorted by their rating stars. The system dynamically adapts the plan based on various factors, such as optimal routs, city traffic conditions, and crowd levels at each locations with the 3D model to provide personalized recommendations and immersive views to satisfy the unique experience of each users.

During traveling, Explore Companion will request user permission to allow them to upload pictures and share their memories on the platform.

In this way, users can contribute to fellow travelers who also share the similar interests.

After-Trip:

Explore Companion allows users to provide feedback on their trips, benefiting others with valuable insights and contributing to product enhancement through data collection.

Explore Companion automatically generate summaries of this adventure including photos, notes, experiences, and unique trip summaries for the users.

MVP:

User registration and profile creation: App should allow users to sign up, create profiles and then set preferences related to their travel interests, budget, and also other preferences;

Destination planning: App should enable the users to select the destinations for their trips and also add them to their itineraries and then allocate these destinations to each specific days of their trip;

3D environment creation: Create the 3D models of the environment, which users want to see, including streets,buildings, and terrain, based on the imported data.

Recommendation of places: Use python to grab the data of location and to recommend the places user interested in.

Feedback System: App includes a feedback system for users to share their thoughts and suggestions which can contribute to product improvement.

API:

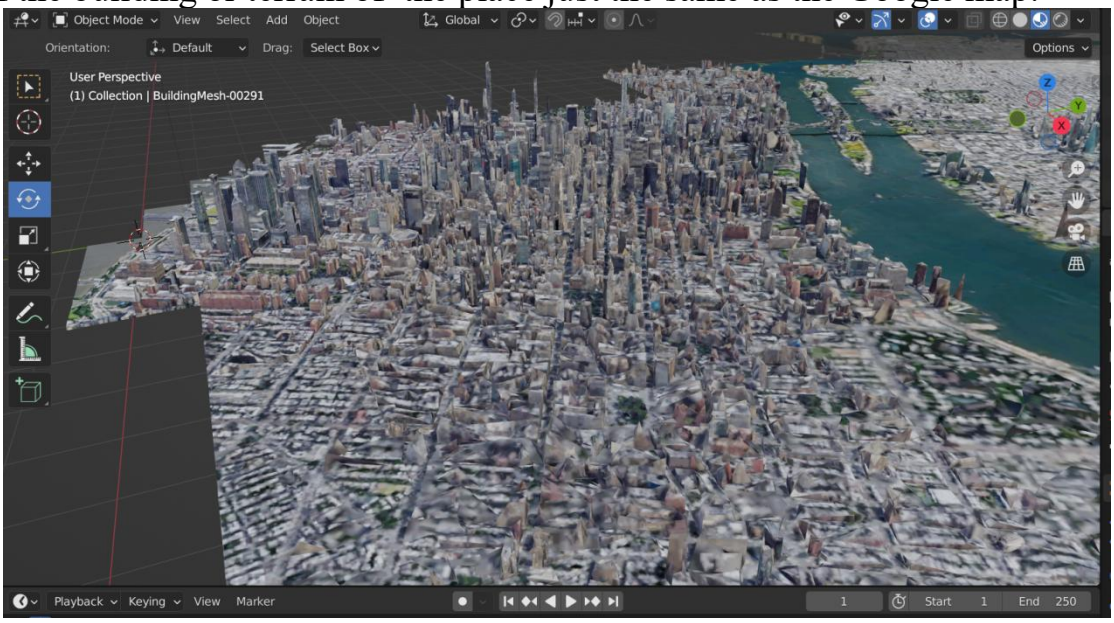
The API mainly focused on creating 3D model:

Google Map + Blender:

Search the place on Google Map and then map the 3D picture of the place into the Blender so that user can see the detail of the building or terrain of the place just using the app.

We search on the Google Map for Time Square, then we can see the picture like this:

Then we can map the whole 3D model into the Blender to get the detail of the building or terrain of the place just the same as the Google map:



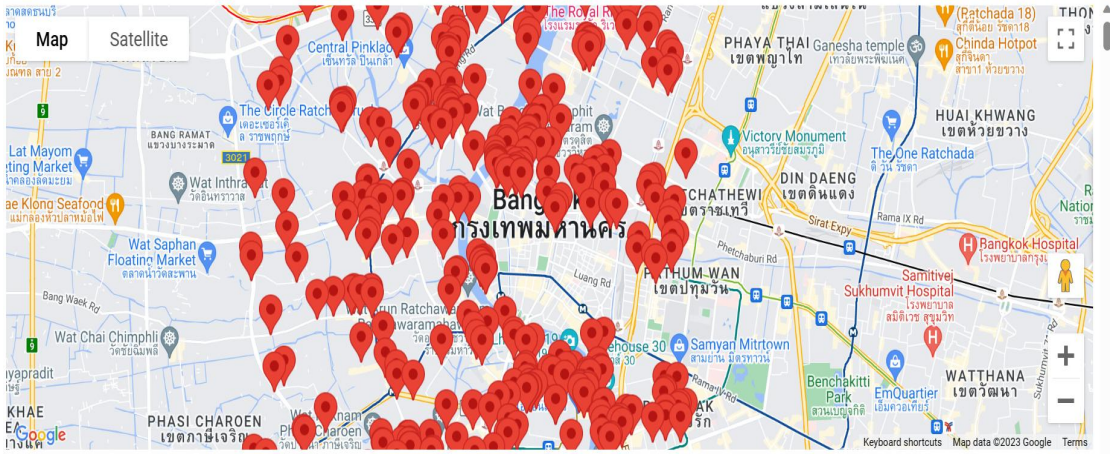
The result is timesquare.blend that can be opened with blender(app).

Also I combine the Google map API with python to get the output of the place that people want to go with their names, address, longitude, latitude,and also the rating star, according to the place people choose. Then use the flask frame to get the map of the bars according to the rating stars.

For example, I want to choose the bar in Thailand, and I search in the python according to the latitude and longitude, then I get the bar recommendation which is listed in the excel.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Name	Address	Latitude	Longitude	Rating														
2	ﾁｬﾝﾁｭｰｲ	20/150 ถน	13.67684	100.451															
3	MEROS Cc	200 Rama	13.66888	100.4661	4.3														
4	กีตาร์	505 Thanc	13.68062	100.4742	5														
5	ร้านนุ๊กเต๋า	เลขที่43/1	13.68178	100.4788	4.3														
6	COCO-bar	52/105 ถน	13.68131	100.4814															
7	Charoeng	MFMM+6I	13.68308	100.4843															
8	Good Inn	75 Thanor	13.68737	100.4929	3.1														
9	สองสลึง	MFMR+6C	13.68308	100.4913	5														
10	เฮียหมา	254 Thanc	13.68314	100.4916															
11	ลุงใจดีน้ำ	MFJV+FJG	13.68115	100.4941	5														
12	Cuba Bar&	331, 12 Th	13.6844	100.4957															
13	ร้านนิวแป้ง	255, 1 Soi	13.68927	100.4829															
14	รสสุรา พา	465 Soi Su	13.67587	100.4928															
15	New แป้ง	509, 308 T	13.6894	100.4825															
16	เฮียสี่ พาเ	782, 388 ส	13.67562	100.493	4														
17	The TalkSI	Bang Pako	13.67659	100.4996	5														
18	Happy Pul	207 Thanc	13.67572	100.5017															
19	New VIP C	61 Soi Suk	13.67795	100.4993															
20	The Jass P	170/2 Tha	13.6753	100.5025															
21	StudioJun	394/144 T	13.67728	100.5025															

Also with the website of the whole map decorated with rating stars bars.



Name	Address	Rating
ﾁｬﾝﾁｭｰｲ	20/150 ถนน พระราม ๒, Khwaeng Chom Thong, Khet Chom Thong	0.0
MEROS Coffee & Eatery	200 Rama II Soi 33, Khet Chom Thong	4.3
กีตาร์	505 Thanon Praram 2, Khwaeng Bang Mot, Khet Chom Thong	5.0
ร้านนุ๊กเต๋าคาราโอเกะ	เลขที่43/18 Thanon Praram 2, Khwaeng Bang Mot, Khet Chom Thong	4.3
COCO-bar	52/105 ถนน พระราม ๒, Khwaeng Bang Mot, Khet Chom Thong	0.0
Charoeng Karaoke	MFMM+6PP, ทางคู่ขนานถนนพระราม 2, Khwaeng Bang Mot, Khet Chom Thong	0.0
Good Inn Hotel	75 Thanon Rat Burana, Khwaeng Bang Pakok, Khet Rat Burana	3.1