IT 309 SOFTWARE ENGINEERING

PROJECT DOCUMENTATION

VisitSA

Prepared by:
Damir Todić
Mirza Nikolić

Proposed to:
Nermina Durmić, Assist. Prof. Dr.
Aldin Kovačević, Teaching Assistant

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Contents

1. Introduction

VisitSA is a mobile application designed to help tourists find their way around the city of Sarajevo. Recommending them a number of attractive locations and tours which they are encouraged to visit/join. In this way, we intend to promote our town and it's beautiful attractions in the best possible way since it would be a shame not to allow our town to prosper given it's unremarkable potential.

1.1. About the Project

The main idea was to create an attractive looking but simple UI which will be easy to interact with and also pleasing for the eyes. Recommended attractions and tours are shown first based on the subscription (paid promotion of tours and restaurants), other restaurants/tours will be ranked by the ratings of our users. The application is intended for visiting tourists giving them the opportunity to make their visit as smooth as possible.

Link to where the project is deployed:
https://appdistribution.firebase.google.com/testerapps/1:1014748662810:android:c121e8a4b09049ab6ed5a3/releases/2hm91tl0subk8?utm_source=firebase-console

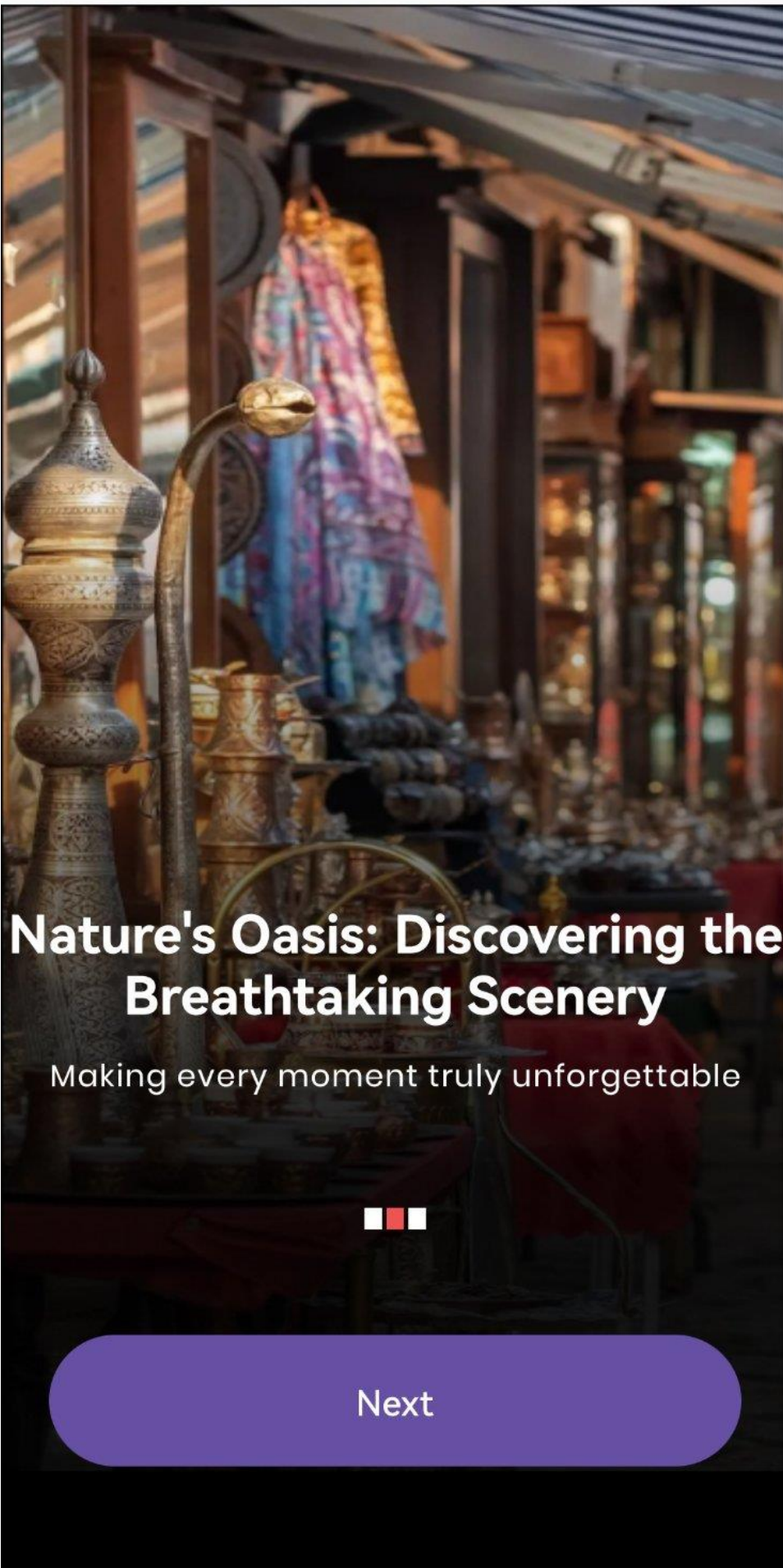## 1.2. Project Functionalities and Screenshots

- Register

- Log In

- OnBoarding

- Home Screen

- Individual Item Screen

- Locations

- Map

- Tours

- User Settings

Historical Riches: Unveiling the Architectural Splendor

Unlock the hidden gems of your destination

Next

5% 21:41

Nature's Oasis: Discovering the Breathtaking Scenery

Making every moment truly unforgettable

Next

Cultural Tapestry: Immersing in the Vibrant Arts and Traditions

Ensuring a stress-free travel experience

Next

Sign In

Enter email

Enter password

Sign In

Have an account? Sign Up

Continue as Guest

Sign Up

Enter username

Enter email

Enter password

Sign In

📍 Welcome to Sarajevo

🔍 Search...

| Hotels | Restaurants | Clubs |

Recommended

Hotel

Hotel Central
Ćumurija 8
$$$ ⭐ 4.3

Hotel

Hotel Holiday
Zmaja od Bosne 4
$$$ ⭐ 4.5

Other choices

Swissôtel
Vrbanja 1

📍 Sarajevo   **94$** /Person

Radon Plaza
~~Dzemala Bijedica 185~~

📍 Welcome to Sarajevo

🔍 Search...

| Hotels | **Restaurants** | Clubs |

Recommended

Restaurant

Restaurant

Avlija
Avde Sumbula 2
$$$ ⭐ 4.7

BarSa
Despićeva 7
$$$$ ⭐ 4.8

Other choices

Blind Tiger
Dalmatinska 2

📍 Sarajevo

Cakum Pakum
Kaptol 10

📍 Welcome to Sarajevo
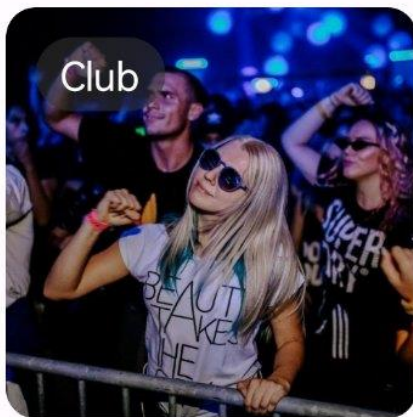
🔍 Search...

Restaurants **Clubs** Tours

Recommended

Club

Club

Silver & Smoke Club
Zelenih beretki 12
$$ ⭐ 4.5

Aquarius Club
Zmaja od Bosne 13
$$ ⭐ 4.6

Other choices

Dom Mladih
Terezija bb

📍 Sarajevo

Mr & Mrs Cue
Vilsonovo šetalište 13

📍 Welcome to Sarajevo

🔍 Search...

Restaurants   Clubs   **Tours**

Recommended

Tour   Tour

Historical Heritage Walk **Tastes of Sarajevo**
Sarajevo   Sarajevo
$ ⭐ 4.6 $$$ ⭐ 4.8

Other choices

Bridges of Sarajevo Bike **10$ /**
Sarajevo   **Perso**

📍 Sarajevo   **n**

Art and Culture Stroll
                   15$ /

🏠   📍   🗺   ⚙

←

Hotel Holiday

Hotel Holiday

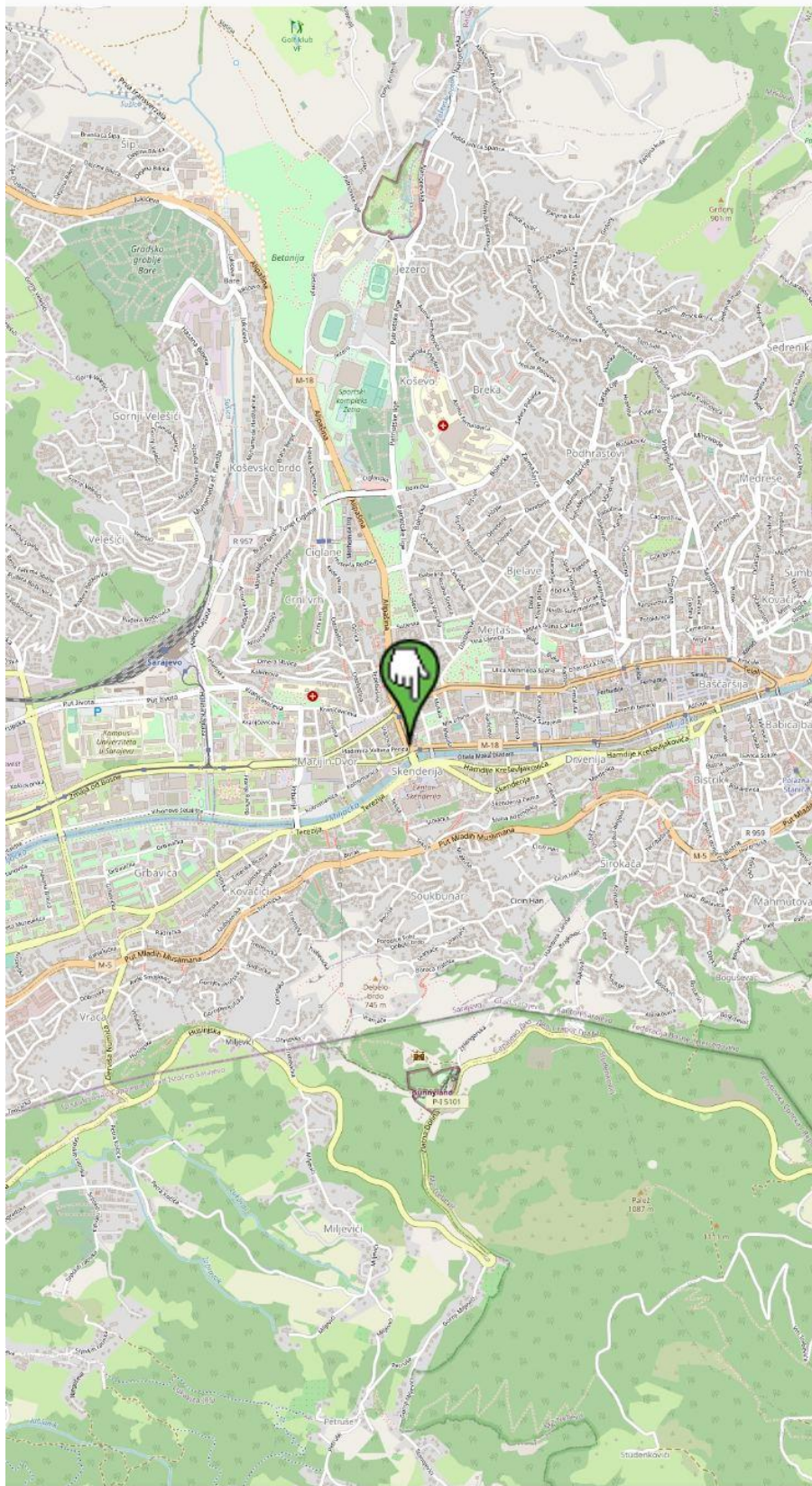📍 Zmaja od Bosne 4 ⭐ 4.5 ❤️

Details

Hotel Holiday is a well-established hotel situated in a tranquil area of Sarajevo, offering a serene and relaxing atmosphere for guests. The hotel boasts spacious and elegantly furnished rooms, providing a comfortable retreat after a day of exploring the city. Guests can enjoy a range of amenities, including a fitness center, a sauna, and an on-site restaurant serving delectable dishes. The hotel's attentive staff and scenic surroundings make it an ideal choice for a peaceful stay.

45$ / Person

Contact property

● Tours

All	Popular	Recommended

Tour

Historical Heritage Walk
Sarajevo
$ ⭐ 4.6

Tour

Tastes of Sarajevo
Sarajevo
$$$ ⭐ 4.8

Tour

Sarajevo Panorama
Sarajevo
$$$ ⭐ 4.9

Tour

Bridges of Sarajevo Bike
Sarajevo
$ ⭐ 4.8

←

Tastes of Sarajevo

Tastes of Sarajevo ❤️

📍 Sarajevo ⭐ 4.8

Details

Embark on a culinary adventure through Sarajevo's vibrant food scene. This gastronomic tour introduces you to the city's diverse flavors and traditionaldishes. Indulge in delicious cevapi, a local specialty of grilled meat served with warm flatbread, or savor the hearty flavors of Sarajevski Stew. Explore the bustling markets and try authentic Bosnian sweets like baklava. Along the way, your knowledgeable guide will share insights into the cultural significance of the food and its connection to Sarajevo's history.

30$ / Person   **Book Now**

General

🌐 Language   >

About

🛡 Legal and Policies   >

❓ Help & Support   >

📈 Dark Mode   ⬤━

2. Project Structure

2.1. Technologies

The technologies that were used in the project are as follows:

Frontend: Kotlin Jetpack Compose

Backend: Node.js Typescript, MySQL

Coding standard: Java Code Conventions (Applicable on Kotlin)

2.2. Database Entities

users

reviews -> stores user reviews for a particular item

item -> stores information about restaurants, hotels, tours, clubs

Item 1 -> ∞ Reviews

users 1 -> ∞ Reviews

2.3. Design Patterns

- Singleton Design Pattern: in the file:
  app/src/main/java/com/example/visitsacompose/common/di/ApplicationModule.kt

2.4. Tests

Unit test case path: app/src/test/java/com/example/visitsacompose/ToursExtTest.kt

The file contains 3 test cases which check if the correct Boolean is returned based on the integer value so the routes can be filtered properly. For this we created an extension of filterTours function so that it can be testable.

3. Conclusion

In conclusion we are strongly satisfied with the implementation of the project. Naturally, there is room for improvement such as implementing a working search bar and interactive map functionalities along with adding more language options to the app. One more thing that should be added are applications for city tours but since the tours are fictional that could be done later on when we would get real customers willing to let us promote their tours. Another improvement would be using a more reliable api deployment website since the one we are using now is render which is a free hosting website for node.js but sometimes it can get really slow when the page is overloaded. I would ask you to have understanding for this since we did not want to pay for an api domain at this stage, none the less that would be a crucial thing to change if this application were to go on the app store. We

consider the project very well done design wise and if those changes mentioned were added we strongly believe this project would be a great asset to the tourism of our city.