

CSE3044 SOFTWARE ENGINEERING

PROJECT STEP 4

Design Specification Document

ListenMe Radio App

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1. INTRODUCTION

1.1 PURPOSE

This document is prepared to introduce ListenMe Android app. This app will gather all the radio channels that the user likes. With this way, users can use the radio easier than now. Also, the app will take the voice of a human and will know which channel to play by an order.

1.2 SCOPE

ListenMe app is an awesome app for radio listeners. If you are a listener of specific music types and specific radio channels it can be torture to changing the frequency of your desired channel and finding it. Or it is harder to remind channels frequency to listen. ListenMe makes it easier to gather your all desired radio channels. With this way, you can go forward and backward to change channels, no need to check frequency or no need to waste more time. There is a plus feature of the app. If you are not close to your phone, you can still change the channel by your voice. You say 'change' then radio channel changes.

1.3 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

Me: User of the app who listens to radio from ListenMe.

Roof: User's repository for radio channels. There are radios that the user chose. User change channels from here add and remove channels in here.

Android: An open source operating system that is used in smart-phones and tablets.

Java: The programming language for creating applications.

1.4 REFERENCES

For System architecture design and class diagrams

<https://www.cs.cornell.edu/courses/cs5150/2014fa/slides/E1-sys-arch.pdf> <https://www.ibm.com/developerworks/rational/library/content/RationalEdge/sep04/bell/>

2. DESIGN CONSIDERATIONS

Our project is based on android technologies. In the project for streaming the radio we use the famous radio server like joy fm. This radio server send the data from network. That is why; the users have to have internet connection and electronic device such as android tablet or smart phone.

Addition to this, the users' devices have to support voice-module for voice interaction.

2.1 ASSUMPTIONS AND DEPENDENCIES

The users of this software need to have basic knowledge about using web technologies. Addition to that, they have to have an electronic device such as computer, tablet or smart phone.

2.1.1 CONSTRAINTS

The system is coding with Java. Firebase and Mongo cloud database system must work as is wanted.

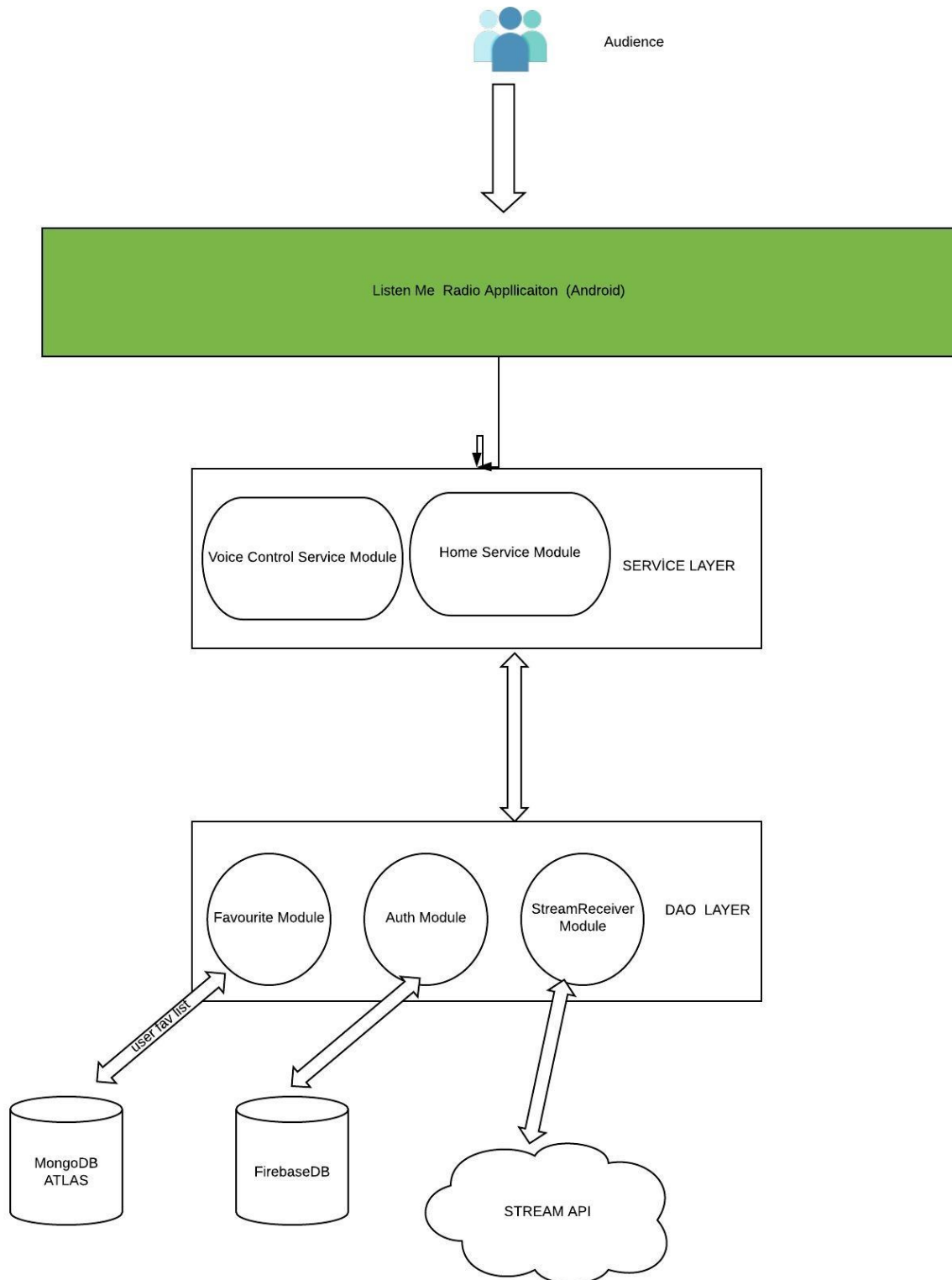
2.1.2 SYSTEM ENVIRONMENT

The system will be developed on Unix (Operating System) while using mongo compass and Android Studio IDE.

3 .SYSTEM DESIGN

3.1 ARCHITECTURAL SYSTEM DESIGN

The diagram below shows the connections between systems' itself and their interactions.



3.2 CLASS DIAGRAM

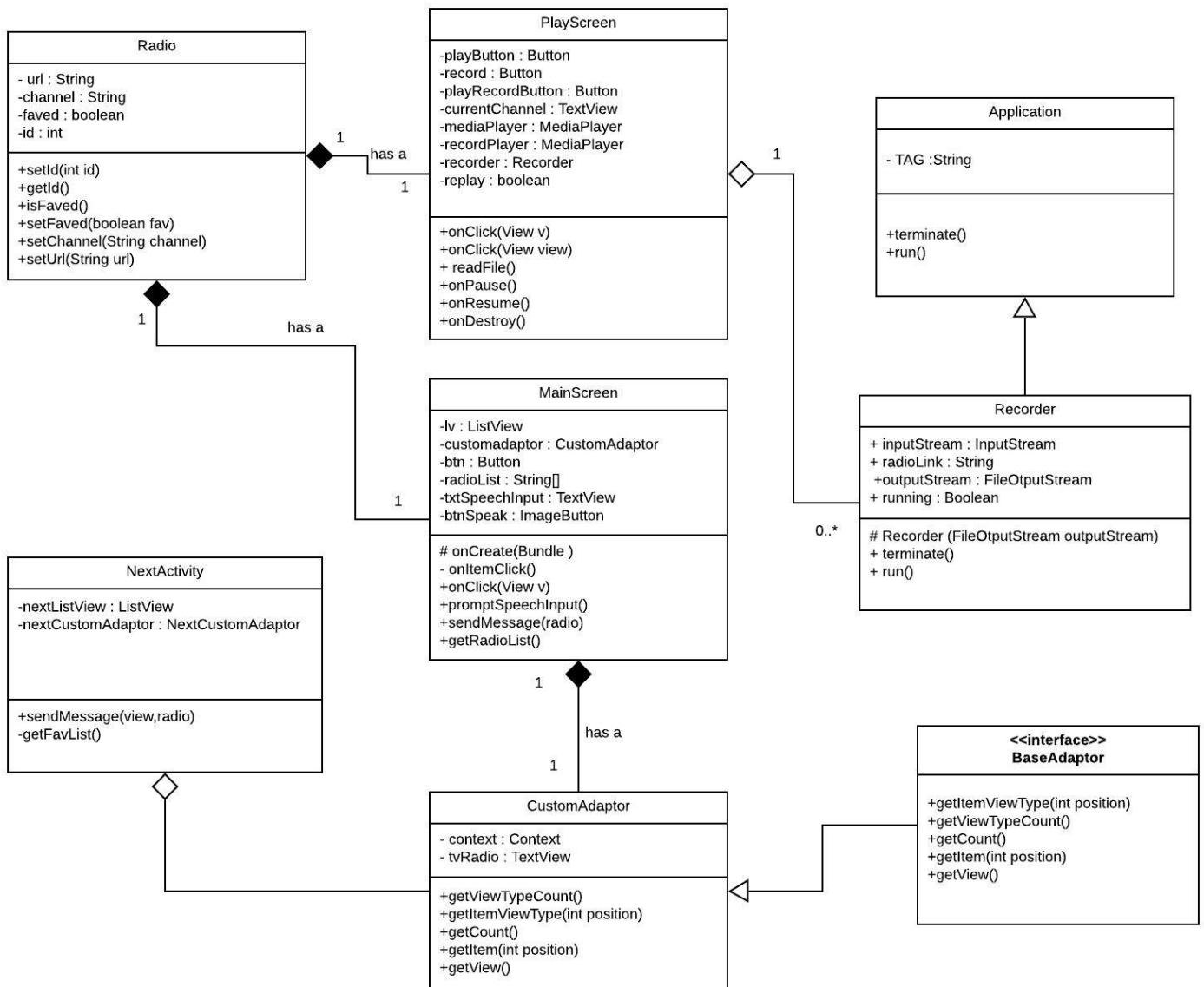


Table Work

Tuğberk Çelik	Caner Yeşildağ	Barış Avincan	Muhittin Kaya
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