

Design Document

TalkBox Simulator/Configuration

Group 5:

Sangheon Jae

Karmit Patel

Peter Saleeb

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DESIGN DOCUMENT

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1.0 GENERAL INFORMATION

A. GENERAL INFORMATION

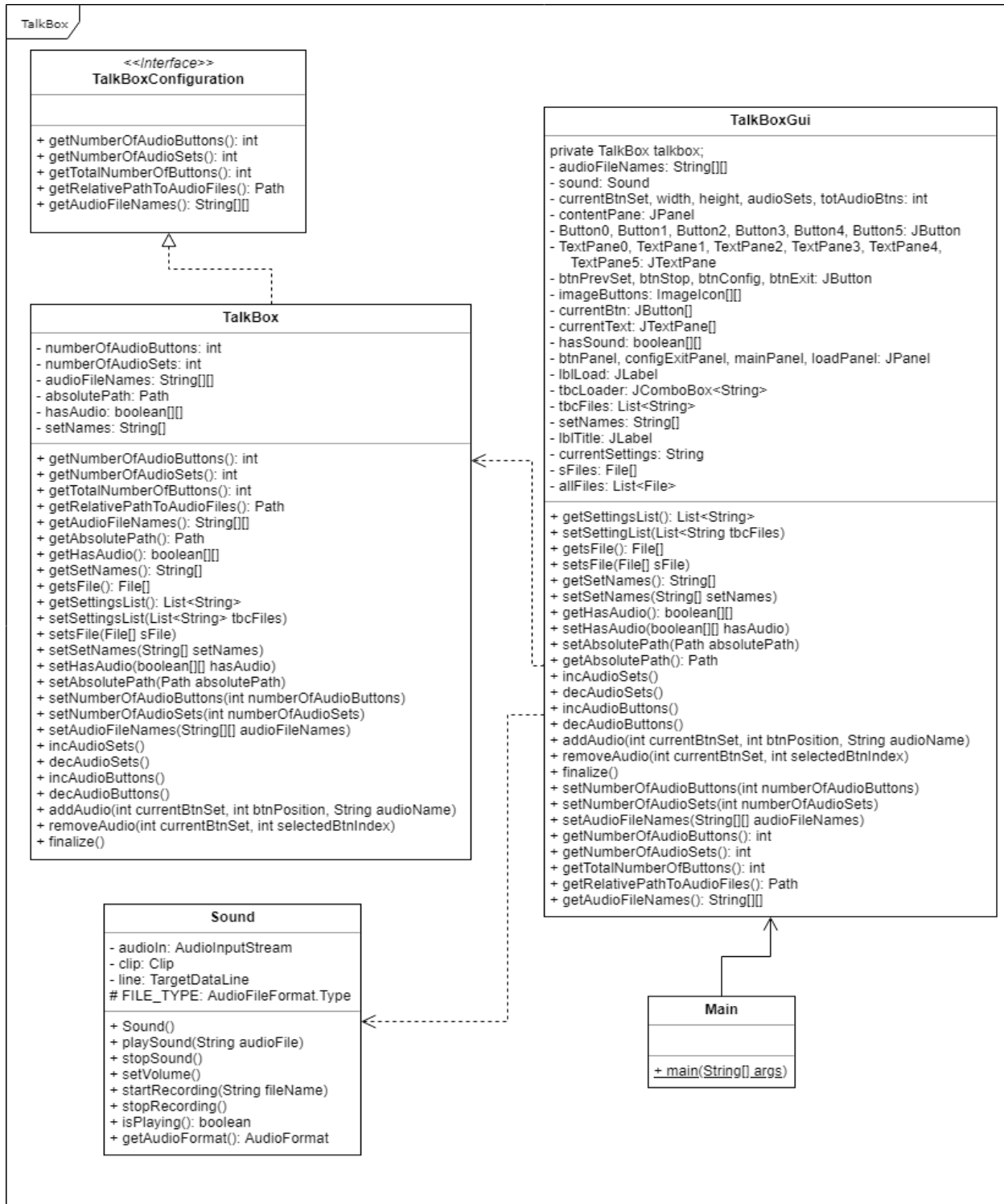
1.1 Design Goal

The development for this project will follow information hiding (by not letting users to access the private attributes in class), modularity (based on performance, classes will be separated by their features). Also, project will be developed with following design principle. Each module will follow single responsibility principle by letting each module is responsible for their own act. During the development, several Junit test cases will be used for regression testing. With the help of 'gradle' project will be easily tested to help with continuous development.

2.0 GETTING STARTED

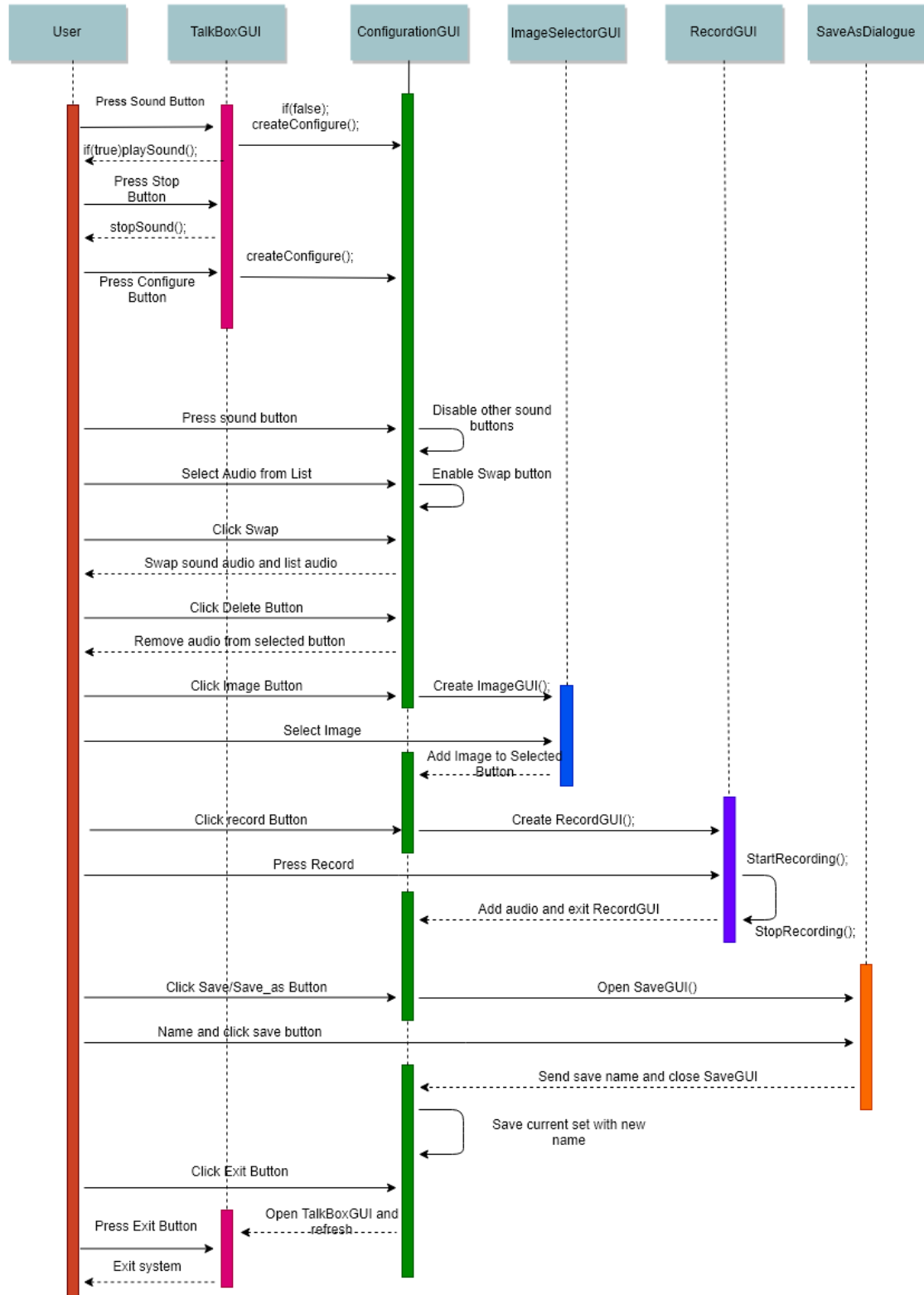
B. UML DIAGRAMS

2.1 UML Class Diagram



2.2 UML Sequence Diagram

All Included



3.0 TALKBOX SIMULATOR

C. TABLE OF MODULES

3.1 Model

1	TALKBOXCONFIGURATION	Responsibility: a basic template for serializable object 'TalkBox'. It has several methods that allow object attributes to change	Alternative: see TALKBOX
	Abstract	Secret: none	

1.1	TALKBOX	Responsibility: concrete implementation for 'TalkBoxConfiguration', it will have more methods that helps original methods to work efficiently	Alternative: see TALKBOXCONFIGURATION
	Concrete	Secret: every attributes are 'private' so user can not access directly	

2	SOUND	Responsibility: controls every feature that associate with sound	Alternative: none
	Concrete	Secret: audio clip	

3	CHECK	Responsibility: contains methods that return true/false based on their file type	Alternative: none
	Concrete	Secret: none	

3.2 View

1	TALKBOXGUI	Responsibility: started app for TalkBox, this app lets user to control the app with the GUI	Alternative: none
	Concrete	Secret: none	

2	CONFIGURATIONGUI	Responsibility: configuration app for TalkBox, this app lets user to control the app with the GUI	Alternative: none
	Concrete	Secret: none	
3	RECORDGUI	Responsibility: allow users to record audio file with GUI	Alternative: none
	Concrete	Secret: none	

3.3 Controller

1	MAIN	Responsibility: start TalkBoxGUI and logger	Alternative: none
	Concrete	Secret: none	

4.0 SUMMARY OF TESTING PROCEDURES

D. SUMMARY OF TESTING PROCEDURES

4.1 JUnit Tests Result

Test file	Description	Passed
SoundTest	testTrue()	✓
SoundTest	test()	✓
SoundTest	testExpectedExceptionFail()	✓
TalkBoxTest	AddAudio_test()	✓
TalkBoxTest	setNumberOfAudioSets_test()	✓
TalkBoxTest	setAndGetHasAudio_test()	✓
TalkBoxTest	RemoveAudio_test2_All()	✓
TalkBoxTest	setAudioFileNames_test2()	✓
TalkBoxTest	getNumberOfAudioButtons_test()	✓
TalkBoxTest	getRelativePathToAudioFiles_test()	✓
TalkBoxTest	setAndGetFile_test()	✓
TalkBoxTest	setAndGetImages_test()	✓
TalkBoxTest	setAndGetSetNames_test()	✓
TalkBoxTest	getTotalNumberOfButtons_test()	✓
TalkBoxTest	NumberOfAudioSets_increase_test()	✓
TalkBoxTest	NumberOfAudioButtons_increase_test()	✓
TalkBoxTest	NumberOfAudioSets_decrease_test()	✓
TalkBoxTest	setAndGetSettingsList_test()	✓
TalkBoxTest	NumberOfAudioButtons_decrease_test()	✓
TalkBoxTest	RemoveAudio_test()	✓
TalkBoxTest	setAudioFileNames_test()	✓

