Text2SpeechEditor

Final Release Report

ADID Inc.

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Text to Speech

VERSIONS HISTORY

Date	Version	Description	Author
24/05/2020	Final	Final release of Text2SpeechEditor	Athanasios Dimosiaris Ioannis Dimitriou

1   Introduction

This document provides information concerning the final release of our Text2Speech Editor project.

1.1   Purpose

The Text2Speech Editor is a useful tool that allows the computer to convert a given text into speech. Our objective is to create a simple editor that allows preparing text documents and transforming them to audio. The application can have many uses, such as helping people with speaking problems. It consists of a graphical user interface, a back-end that enables the text editing and transforming to speech process, with the latter being based on external libraries.

1.2   Document Structure

The rest of this document is structured as follows. Section 2 describes out Scrum team and specifies the this Sprint's backlog. Section 3 specifies the main design concepts for this release of the project.

2   Scrum team and Sprint Backlog

2.1   Scrum team

Product Owner	Apostolos Zarras
Scrum Master	Athanasios Dimosiaris
Development Team	Ioannis Dimitriou

2.2   Sprint Backlog

Test ID	Rot13Test
User Story	The user can encode the text using the Rot13 cipher.
Test Class	Rot13Test.java

Test ID	AtBashTest
User Story	The user can encode the text using the AtBash cipher
Test class	AtBashTest.java

Test ID	DocumentCreationTest
User Story	The user can create a document by giving a specific path
Test Class	Document.java

Test ID	DocumentEditTest
User Story	The user can edit and save a document
Test Class	Document.java

Test ID	DocumentOpenTest
User Story	The user can open an existing document
Test Class	Document.java

Test ID	DocumentTuningTest
User Story	The user can tune a document by changing volume, rate and pitch
Test Class	Document.java

Test ID	FakeTextToSpeechAPI
User Story	Just for developer testing
Test Class	Document.java

3   Design

3.1   Architecture
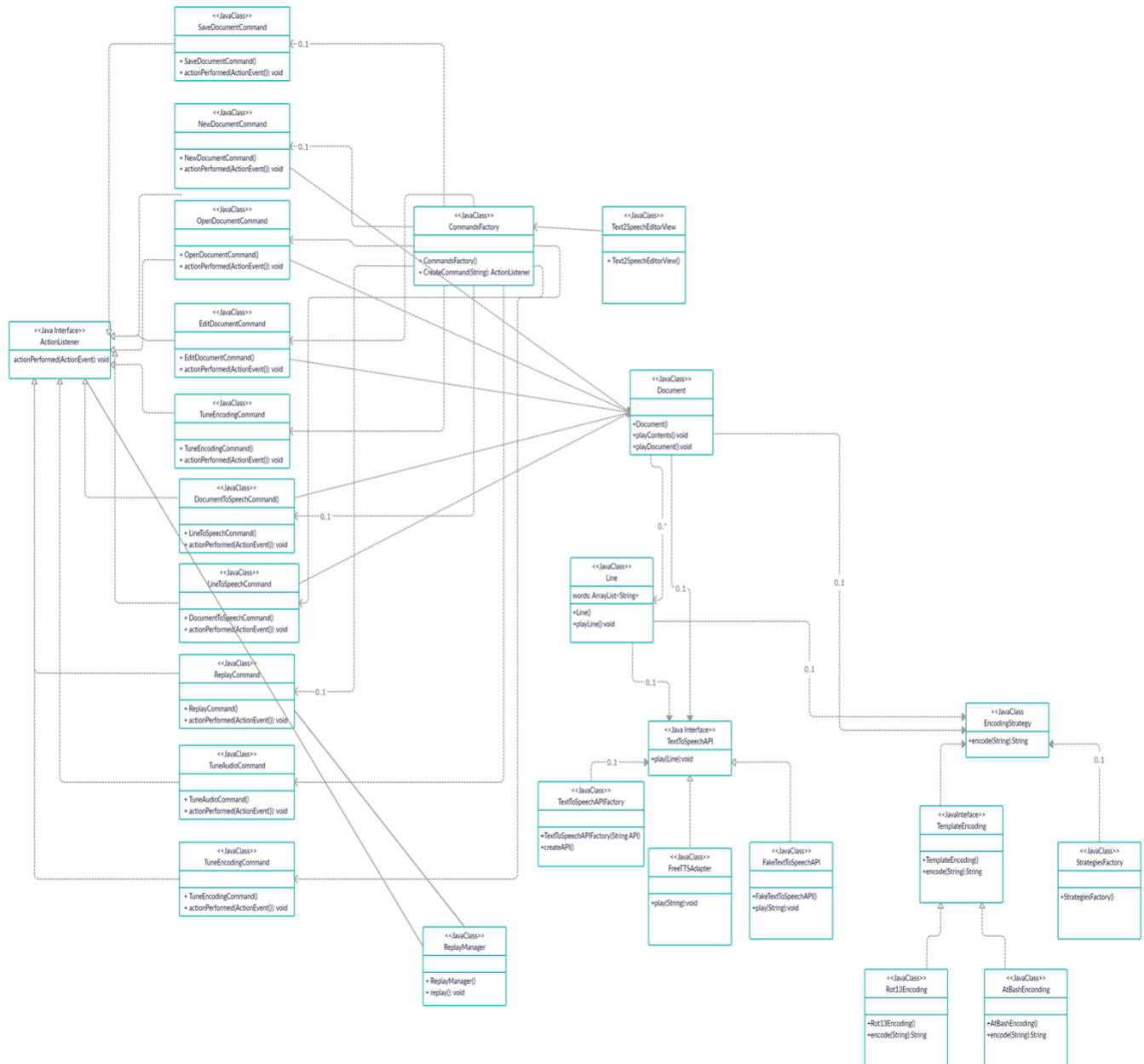
3.2   Design

All Java classes according to CRC cards.

Class Name: AtBashEncoding	
Responsibilities:	**Collaborations:**
▪ Encode text by using the AtBash cipher	▪ Document Class

Class Name: EncodingStrategy	
Responsibilities:	**Collaborations:**
▪ Strategy interface	▪ Rot13Encoding Class ▪ AtBashEncoding Class

Class Name: FakeTextToSpeechAPI	
Responsibilities:	**Collaborations:**
▪ Creating a fake API	▪ Document class

Class Name: FreeTTSAdapter	
Responsibilities:	**Collaborations:**
▪ FreeTTS library adapter	▪ Document class

Class Name: Rot13Encoding	
Responsibilities:	**Collaborations:**
▪ Encode text by using the Rot13 cipher	▪ Document class

Class Name: StrategiesFactory

Responsibilities:	Collaborations:
▪ Choosing and creating encoding strategy	▪ Document class

Class Name: TemplateEncoding

Responsibilities:	Collaborations:
▪ Makes encoding template	▪ Document class

Class Name: TextToSpeechAPI

Responsibilities:	Collaborations:
▪ API interface	▪ Document class

Class Name: TextToSpeechAPIFactory

Responsibilities:	Collaborations:
▪ Choose the FreeTTS or Fake API and create it	▪ Document class ▪ TextToSpeechAPI

Class Name: Document

Responsibilities:	Collaborations:
▪ Document object and data	▪ Line class

Class Name: Line

Responsibilities:	Collaborations:
▪ Line object and data	▪ Document class

Class Name: EditDocPanel

Responsibilities:	Collaborations:
▪ Edit document panel for the graphic user interface	▪ Document class

Class Name: OpenDocPanel	
Responsibilities:	**Collaborations:**
▪ Open document panel for the graphic user interface	▪ Document class

Class Name: SettingsPanel	
Responsibilities:	**Collaborations:**
▪ Settings panel for the graphic user interface	▪ Document class

Class Name: Speech2TextEditorView	
Responsibilities:	**Collaborations:**
▪ Graphic user interface	▪ All