

## Project application

# Die Melodie – Music sheets reading software for blind people

This document contains confidential information about the project <Music sheets reading software for blind people> and may only be passed on within the FH Technikum Wien project team and to the persons explicitly listed in the distribution list below.

### Project team [alphabetical]

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### Project supervisors, customers, taught [alphabetically].

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### Document Development

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1.0	First creation of the document.	01.04.2023
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2.0	Andrea Spasojevic	AH-project_vision-andrea_spasojevic-laszlo_magocsi-2023	25.06.2023	25.06.23.	1 / 3

## Table of contents

Project application .....	1
Die Melodie – Music sheets reading software for blind people .....	1
Project team [alphabetical] .....	1
Project supervisors, customers, taught [alphabetically]. .....	1
Document Development .....	1
Table of contents .....	2
Project short description .....	2
Goals and project delimitation .....	2
Project team and team roles .....	2
Rough schedule and priorities n .....	3

### Project short description

Die Melodie is a software created with python that provides music sheet recognition for people with vision problems. Only a scanned .pdf document is needed, whose notes will be recognized by this software. It can read the notes notations rhythmically. Converted notes are saved as a PDF file that can be read by python developed software. Notes are also converted to MIDI file that can be played, which makes a learning new songs easier. All the python software is meant to be connected in a simple web application. A web application is created using HTML and CSS.

### Goals and project delimitation

- Basic understanding of an ABC notation.
- Creating software that converts musical sheets into hearable and followable information.
- Software created a PDF with converted notes.
- Creating software to read a PDF aloud.
- Creating software to convert the notes to a MIDI playable file.
- Can't handle musical instructions (crescendo).
- Sometimes a converted notes are one scale lower than meant.
- Python maybe was not the best solution for this task.

### Project team and team roles

Name	Main responsibility	Team Roles
László Magócsi	Software	Software developer
Andrea Spasojevic	Project management, software, web application	Project management, software developer

Task Matrix (R=Responsible) including estimated task effort (in person hours)

Version	Author	File name	Last change	Print date	Page
2.0	Andrea Spasojevic	AH-project_vision- andrea_spasojevic- laszlo_magocsi-2023	25.06.2023	25.06.23.	2 / 3

AP #	Work package	T. Krammer	L. Magócsi	A. Spasojevic		Person hours Estimate
<b>1000</b>	<b>Project preparation phase</b>					<b>26,0</b>
1100	Assemble team, division of roles	X		R		3,0
1200	Project planning (online meetings)	X		R		12,0
1300	Project planning (meetings on campus)	X	R			11,0
<b>2000</b>	<b>Project implementation phase</b>					<b>133,0</b>
2050	Know-how development	X	R	R		11,0
2100	Concept creation	X		R		3,0
2150	Get necessary information	X	R			8,0
2200	Set up environment	X	R	R		4,0
2250	Get old projects to work 1.0	X	R			15,0
2300	Web application 1.0	X		R		6,0
2350	Creation of <b>readaloud</b> software	X		R		7,0
2400	Get old projects to work 2.0	X	R			12,0
2450	Creation of new <b>convertnotes</b> software	X	R	R		20,0
2500	Creation of <b>notestomidi</b> software	X	R	R		9,0
2550	Web application 2.0	X		R		6,0
2600	Test 1.0	X	R			6,0
2650	Bug fixing	X	R			10,0
2700	Test 2.0	X		R		4,0
2750	Web application FINAL	X		R		12,0
<b>3000</b>	<b>Project follow-up phase</b>					<b>11,0</b>
3100	Project evaluation	X	R			4,0
3200	Final test	X		R		3,5
3300	Final approval	X		R		1,5
3400	Create final presentation	X	R			2,0

### Rough schedule and priorities n

Logic ready 30.04.23.  
 Data ready 07.05.23.  
 Evaluation 17.05.23.  
 Tests finished 01.06.23.  
 Software ready 01.06.23.  
 Web application 10.06.23.  
 Presentable 15.06.23.

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