

Binary file handling tool

Kick-off Summary

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1. Document History

Version	Date	Author	Approved by	Additional information
0.1.0	2020/11/10	A.Brzezina, K.Chowańska	A.Brzezina, K.Chowańska	the Kick-off Summary created after the first laboratory
0.2.0	2020/11/10	K.Chowańska	A.Brzezina, K.Chowańska	corrections added after consultation with the team
0.2.1	2020/11/11	A.Brzezina	A.Brzezina, K.Chowańska	editorial changes and text quality improvements
1.0.0	2020/11/11	A.Brzezina, K.Chowańska	_	release candidate
1.0.1	2020/11/13	A.Brzezina	A.Brzezina, K.Chowańska	changed "Spis treści" to "Table of Contents"
1.1.0	2020/11/13	K.Chowańska	A.Brzezina, K.Chowańska	addition of roles division ta- ble in point 4; role division improvement
1.1.1	2020/11/13	A.Brzezina	A.Brzezina, K.Chowańska	change of the colour of the table's first row
2.0.0	2020/11/13	A.Brzezina, K.Chowańska	_	release candidate

2. Introduction

The project kick-off meeting was held online via Microsoft Teams (due to the state of epidemic threat) on November 10, 2020. Its underlying objectives were:

- presentation of the project idea and its principles
- preparation of the division of project roles
- selection of software development tools

The meeting, organized by the Project Coordinator Jakub Nalepa, PhD, established an agenda of the future meetings. The following report outlines the decisions made during the meeting.

3. Project description

Background

Viewing the contents of binary files is usually troublesome and requires software tools to be used which support a given file format. It may be helpful to develop a tool for viewing such files of a defined format with an option to export them to a text file.

Task description

The aim of this project is to develop a tool for reading the binary files and making it possible to export them (or a part of them) to a text file (of a format defined by the user). The following issues should be addressed:

- 1. Structure of the binary file should be specified by the user the tool should allow for defining both linear and iterative structures (note that the number of iterations may be written in the binary file).
- 2. Once defined, the file structure could be serialized. A list of several recently used formats should be available in the GUI. The same applies to the recent file folder.
- 3. The GUI should be intuitive and easy to use, saving the user's effort to operate the program.
- 4. The data read from the file should be presented as text and the data could be stored to a text file (entirely or partially).
- 5. Batch processing (i.e. conversion of entire set of files) should be available.

4. Project roles

4.1. Division of roles

ID	Role	Name and Surname	
1	Team leader	Katarzyna Chowańska	
2	Analyst	Maqsudjon Khusaino	
3	QA Manager	Artur Porębski	
4	Software Architect	Karolina Wylężek	
5	Lead Developer	Kamil Mostowski	
6	Technical Writer	Anna Brzezina	
7	DevOps Developer	Mateusz Urbanek	
8	Testers	Anna Brzezina,	
O	1620612	Mateusz Urbanek	
	Programmers	Piotr Dobras,	
9		Maqsudjon Khusainov,	
9	1 rogrammers	Kamil Mostowski,	
		Karolina Wylężek	

4.2. Team Leader

Description

- responsible for delivering the artifacts on time
- monitors the work performed by the team members
- does not take any other role

Assignment

The role of the Team Leader has been assigned to Katarzyna Chowańska as she has experience in leading a group and has well developed leadership and organizational skills.

4.3. Analyst

Description

- responsible for gathering the requirements
- documents the requirements
- assists in verifying that the requirements are met

Assignment

For our Team Analyst we were looking for someone with good communication skills, active listening skills and great creativity (which is necessary for finding innovative solutions for given requirements) and it was decided that Maqsudjon Khusainov will fit into this role.

4.4. QA Manager

Description

- prepares a test plan (test cases and test scripts)
- manages the team of Testers and monitors the testing process
- is responsible for risk analysis and management

Assignment

Artur Porębski has an eye for details, is thorough in performed tasks and has good communication skills (useful when managing a group of Testers) so in this project he will take over the role of QA Manager.

4.5. Software Architect

Description

- translates the high-level ideas into ideas that can be implemented
- designs the software components to fulfil the requirements
- documents the architecture in UML

Assignment

In our team, Karolina Wylężek has the best design skills, so she will take over the role of an Software Architect. She is a forward thinker and has good technical knowledge which are two important traits of a good Software Architect.

4.6. Lead Developer

Description

- responsible for implementing the software based on the design
- ensures that the software can be integrated on the technical level
- defines the tasks that can be assigned to the Programmers in the issue tracker

Assignment

When we were discussing our strengths we discovered that Kamil Mostowski is a person with the best technical knowledge and programming skills in our team. With his very good communication skills he was chosen for a Lead Developer.

4.7. Technical Writer

Description

- prepares the common documentation framework
- gathers the inputs prepared by other team members
- is responsible for writing the documentation
- ensures that the documentation is internally consistent

Assignment

Good qualities of a technical writer include language skills, the ability to concentrate, and above all, solid writing skills. All these things are characteristics of Anna Brzezina, so she was chosen for this role.

4.8. DevOps Developer

Description

- configures the team work tools (e.g. version control, issue tracker, etc.)
- helps in solving the problems with the tools

Assignment

Mateusz Urbanek is the DevOps Developer of our project because he has good problem solving skills, he works well as a part of the team and he is very patient. He also has the greatest experience in working with Git.

4.9. Testers

Description

- assist QA Manager
- implement unit tests
- perform manual testing

Assignment

None of us have experience in testing so for project Testers we chose 3 people with good programming skills who are open to learn new things.

Testers: Anna Brzezina, Mateusz Urbanek

4.10. Programmers

Description

- write the source code based on the tasks assigned by the Lead
- address the problems identified by Testers

Assignment

We decided to choose as many as five Programmers to improve our work by dividing the tasks into more people.

Programmers: Piotr Dobras, Maqsudjon Khusainov, Kamil Mostowski,

Karolina Wylężek

5. Software development tools

5.1. Programming language

Python

It was decided to implement the given task in Python. The main reason behind this decision is the versatility of the language, which offers many possibilities for implementation and development of the project. Moreover, Python is a high-level programming language which makes it quite easy to understand and use.

5.2. Tools

- 1. Visual Studio Code source code editor
 - The environment chosen for coding as it is well known by most of the team
- 2. Git version control system
 - link to view the project: https://github.com/Soft-Eng-AEII-G1-2020
- 3. LaTeX software system for document preparation
 - each version of documents will be uploaded to Git