TEAM S.W.A.G

EDUCATIONAL TRAVELLING



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# IDEA OF THE PROJECT

The general idea for this project was to create a C++ game about travelling in European countries. In the game, you can complete five different quests and save your progress in two other countries from the Balkan Peninsula.

# TEAM MEMBERS

|  |  |
| --- | --- |
| **№** | **Roles in the team** |
| **1** | Konstantin Dinev – Scrum trainer |
| **2** | Victoria Bolashikova – Back-end developer |
| **3** | Kaloqn Dimov – Back-end developer |
| **4** | Gergana Bineva – QA Engineer |

# PROJECT DESCRIPTION

|  |  |
| --- | --- |
| **№** | **Description** |
|  | **General idea** The main idea for this project was to create a C++ game about players travelling around Europe. In the game you can choose to complete a quest in five countries from the Balkan Peninsula. |
| **2** | **Used technologies**  For our project are Visual Studio 2019 as our IDE, Microsoft Teams for connection and communication, MediBang Studio for creating the game design and the logo, GitHub for collaborative work, PowerPoint for creating the presentation, Word for creating documentation and Excel for the QA tests. |
| **3** | **Teamwork**  Our main platform for communication was Microsoft Teams. During the project, we met almost every day. During that time the Scrum Trainer assigned tasks, tracked the progress and discussed further work. |

# PERFORMED TASKS

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| --- | --- |
| **№** | **Completed tasks** |
|  | **Create a main menu** Using the main menu it will be easier to navigate throughout the game. |
| **2** | **Create a settings menu**  In the settings you can change the theme and your hero. |
| **3** | **Implementing a selection option**  When the map is loaded you can select a certain country and start a quest or save your progress in a checkpoint. |
| **4** | **Create quests and checkpoints for the countries**  For five out of the seven countries were created certain quests and for the other two were created checkpoints where you can save your progress. For each country there is a unique design and theme. |
| **5** | **Create QA documentation**  In the QA documentation, you can find all actions and steps in our project that have been tested for functionality. |
| **6** | **Make the README file**  In the readme file, you can get a quick overview of the project. We have added the programming languages we have used, a demo of our project and option from where to install it. |
| **7** | **Make the documentation**  The documentation provides very useful information in terms of the technical aspect. You can learn pretty much everything by reading it. |
| **8** | **Make the presentation**  We have created a short presentation to quickly show what we have done. |

# FUNCTIONS

function.cpp

|  |  |
| --- | --- |
| **Function** | **Description** |
| void drawLossPrompt(int\* promptChoice) | Displays a message when you lose. It gives you the option to return to map or retry the quest. |
| void drawWinPrompt(const char\* message[3]) | Displays a message when you win. |
| void drawEnterPrompt(const char\* message[3]) | Displays a message when you click on a quest. |
| void lockOrUnlockCountry(int index, char lockOrUnlock) | Checks if a quest or checkpoint has been completed. |
| string getCharacterFromSettings() | Displays the character you have selected in the Settings. |
| void drawComingSoonPrompt(Texture2D background, int\* promptChoice, Color color, bool isBulgaria) | Displays a message on countries which aren’t finished. |

main.cpp

|  |  |
| --- | --- |
| **Function** | **Description** |
| int startProgram() | Loads the main menu. |

map.cpp

|  |  |
| --- | --- |
| **Function** | **Description** |
| Rectangle convertStringToRect(string str) | Converts a string to the Rectangle data type. |
| void drawMap() | Displays the map and loads the masks of each country. |
| int drawEndScreen() | Displays the end screen when all quests are completed. |

settings.cpp

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| **Function** | **Description** |
| void drawSettingsMenu() | Loads the settings menu design, and lets you change your character and theme. |

checkpoints.cpp

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| --- | --- |
| **Function** | **Description** |
| void drawCheckPoint(const char\* message[], const char\* newLines[], int size, int countryIndex) | Loads the checkpoint prompts. |
| void hungaryCheckpoint() | Loads the Hungary checkpoint when you click on Hungary. |
| void moldovaCheckpoint() | Loads the Moldova checkpoint when you click on Moldova. |

Albania.cpp

|  |  |
| --- | --- |
| **Function** | **Description** |
| void albaniaQuest() | Loads the quest in Albania. |

Bulgaria.cpp

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| --- | --- |
| **Function** | **Description** |
| void bulgariaQuest() | Loads the main base which is Bulgaria. It also integrates an interaction with the mentor who gives you a tutorial about the game. |
| int drawMentorText(Texture2D background, Texture2D mentor, const char\* message[], const char\* newLines[], int size) | Loads the mentor character and starts the interaction with him. |

Greece.cpp

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| --- | --- |
| **Function** | **Description** |
| void greeceQuest() | Loads the quest in Greece. In this quest you have to avoid falling plates for 30 seconds. |

Romania.cpp

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| --- | --- |
| **Function** | **Description** |
| void romaniaQuest() | Loads the Romania quest. In this quest you have to avoid vampires who at first are just a shadow but in one second they become red and will kill you. |

Turkey.cpp

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| --- | --- |
| **Function** | **Description** |
| void turkeyQuest() | Loads the Turkey quest. In this quest you have to jump on cloud platforms while the floor which is Baklava rises beneath you. |

Serbia.cpp

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| --- | --- |
| **Function** | **Description** |
| void serbiaQuest() | Loads the Serbia quest. |

# BLOCK DIAGRAM

