Algonquin College Logo

# SCHOOL OF ADVANCED TECHNOLOGY

### ICT - Applications & Programming

### Computer Engineering Technology – Computing Science



A11

Game Interface

Team:

[Savas Erturk] - Id: [ertu0002]

Game Proposal - NumPuz

***This template is suggested (not mandatory) to answer A11 Specification.***

|  |  |
| --- | --- |
| **Part**  **1** | **GUI Definition** |

**EXPLANATION**

*The purpose of this assignment is to define the elements of the GUI application to be used in your game implementation.*

* ***Example****:*

Table

Description automatically generated with medium confidence

* ***Note****: The professor interface is also a proposal. It means that your own implementation can be different. What does matter is that the game functionality will be respected.*

My number puzzle game name is will be “SaPPuZ”. In the game user is able to play with 2 different difficulty modes. The first mode is normal mode which is timer start to count from zero and the other is the extreme mode which is works with user's 5 won time record get the avarage of the times. Normal mode game will start to counting from zero. Extreme mode time will start to countdown from average

* 1. **Defining the Components**

**List of components**

*Include the list of components that you will use (they can be from Swing or JavaFX).*

On this project, I decided to use java swing library.

JLabel, JRadioButton, GridLayout,JMenuBar, JComboBox, JButton

**Functionalities and Behaviors**

*What are the behaviors and functionalities that you will provide? How these elements are related with functionalities.*

***Example****: The game mode can be selected by RadioButtons, etc.*

* User able to select game mode using by RadioButtons.
* Timer will be displayed on Label in the right menu.
* User able to change game dimension using by ComboBox. The game will provide 3 options 3x3, 4x4, and 6x6.

**Details**

*Drawn your interface (ex: in an image from Paint / Powerpoint slide, or any sketch tool), describing:*

* *The components;*
* *The properties (ex: size, dimension, color, position, etc)*
* *Additional GUI components (ex: the layout to be used).*

Table

Description automatically generated with medium confidence

**JMenubar:** In order to avoid future problems, I am using a menu bar, so I can show on that menu some functions or features

**GridLayout:** The selected dimension will also be used to create it dynamically.

**JComboBox:** User will be able to change dimension of the game. Users will be able to change the dimensions of the game. It will be a 3 options like; 3x3 4x4 and 6x6.

**JLabel:** The timer will be displayed on that component.

**JRadioButton:** Player will choice of the game difficulty mode.

**Normal mode:** The game timer starts counting from zero to up.

**Extreme mode:** The game start counting from your first won time or Gets the first 5 win records and gets then starts a countdown from the average of won records time.

* While the game is under development, the user's steps will be recorded on log files for AI and Machine Learning technologies.
  1. **User Manual**

**Basic cycle**

*Create a brief description about how your game can be used.*

***Example****: If you have to design the solution to be saved and played later, how are the stems. Most importantly, how someone can play the* ***NumPuz****.*

* *Note: your process do not need to be followed exactly when you are going to the implementation. For while, it is only a script about how to play.;*
* Game starts with a normal option which is 3x3 dimensional.

- User needs to start the button to shuffle numbers then the timer will start.

- The game will end when the user numbers are lined up correctly.

**FINAL SUGGESTIONS**

*Here some ideas to think about your language....*

* *Try to create a game whose execution can be very intuitive (easy to be played).*
* *Remember that this game will be in fact implemented only in the next assignment.*

**References**

*[Include eventual references used here]*

Algonquin College

Fall, 2022