Graphical Enigma Simulator

Use Case document

*Introduction*

This document shall outline the use case scenarios of the Graphical Enigma simulator.

1 Encrypt 4

Actors 4

Brief Description 4

Basic Flow of Events 4

Alternative Flows 4

A1 – Does not wish to enter anymore letters 4

A2 – User wishes to exit the simulator 5

A3 – Does Not Confirm to Exit 5

2 Decrypt 6

Actors 6

Brief Description 6

Basic Flow of Events 6

Alternative Flows 6

A1 – Does not wish to enter anymore letters 6

A2 – User wishes to exit the simulator 7

A3 – Does Not Confirm to Exit 7

3 Exit 8

Actors 8

Brief Description 8

Basic Flow of Events 8

Alternative Flows 8

A1 – Does not confirm to exit 8

Encrypt

Actors

The following actors are involved in this use case: User

Brief Description

Allows the user to explore the encryption function.

Basic Flow of Events

The use case begins when the User loads up simulator and accesses the encrypt feature.

|  |  |
| --- | --- |
| System: | Presents main menu. |
| User: | Selects Encrypt from the main menu. |
| System: | Proceeds to the encryption screen. |
| User: | Enters letter which they wish to encrypt into the text box labelled, plain text. |
| System: | Simulation takes place, showing the animations of letter being encrypted into cipher text. |
| User: | Enters another letter to encrypt. (A1) (A4) |
|  |  |

Alternative Flows

A1 – Does not wish to enter anymore letters

This arises when the user does not want to enter anymore letters.

|  |  |
| --- | --- |
| System: | Finishes the animation taking place. |
| User: | Selects a menu option to go back to the main menu. (A2). |

A2 – User wishes to exit the simulator

This arises when the user wants to exit the simulator.

|  |  |
| --- | --- |
| User: | Selects Exit from the menu option. |
| System: | Asks user for confirmation to exit. |
| User: | Confirms Yes. (A3). |
| System: | Simulator closes. |

A3 – Does not confirm to exit

This arises when the user is asked for confirmation to exit.

|  |  |
| --- | --- |
| User: | Selects No. |
| System: | Presents menu. |

A4 – User enters more letters

This arises when the user enters more letters.

|  |  |  |
| --- | --- | --- |
| System: | Simulation takes place, showing the animations of letter being encrypted into cipher text. | |
| User: | Enters another letter to encrypt. (A1) (A4) | |
|  |  | |
|  | |

Decrypt

Actors

The following actors are involved in this use case: User

Brief Description

Allows the user to explore the decryption function.

Basic Flow of Events

The use case begins when the User loads up simulator and accesses the decrypt feature.

|  |  |
| --- | --- |
| System: | Presents main menu. |
| User: | Selects Decrypt from the main menu. |
| System: | Proceeds to the Decryption screen. |
| User: | Enters letter which they wish to decrypt into the text box labelled, ciphered text. |
| System: | Simulation takes place, showing the animations of letter being decrypted into plain text. |
| User: | Enters another letter to decrypt. (A1) (A4) |

Alternative Flows

A1 – Does not wish to enter anymore letters

This arises when the user does not want to enter anymore letters.

|  |  |
| --- | --- |
| System: | Finishes the animation taking place. |
| User: | Selects a menu option to go back to the main menu. (A2). |

A2 – User wishes to exit the simulator

This arises when the user wants to exit the simulator.

|  |  |
| --- | --- |
| User: | Selects Exit from the menu option. |
| System: | Asks user for confirmation to exit. |
| User: | Confirms Yes. (A3). |
| System: | Simulator closes. |

A3 – Does not confirm to exit

This arises when the user is asked for confirmation to exit.

|  |  |
| --- | --- |
| User: | Selects No. |
| System: | Presents menu. |

A4 – User enters more letters

This arises when the user enters more letters.

|  |  |
| --- | --- |
| System: | Simulation takes, showing the animations of the letter being decrypted into plain text. |
| System: | Enters another letter to decrypt. (A1) (A4) |
|  |  |
|  |  |

Exit

Actors

The following actors are involved in this use case: User

Brief Description

Allows the user to exit the simulator.

Basic Flow of Events

The use case begins when the User loads up the simulator.

|  |  |
| --- | --- |
| System: | Presents main menu. |
| Player: | Selects Exit from the main menu. |
| System: | Asks user for confirmation to exit. |
| Player: | Confirms Yes. (A1) |
| System: | Simulator closes. |

Alternative Flows

A1 – Does not confirm to exit

This arises when the user is asked for confirmation to exit.

|  |  |
| --- | --- |
| Player: | Selects No. |
| System: | Presents main menu. |