

**Security Fundamentals and Development (H7SFD)**

**BSHC3**

**CA1 – Group Project Report**

**Group:** E

**Members:**

Eoin Fitzsimons x23151374

Eskandar Atrakchi x23137517

David O’Connor x23153784

Lecturer: Kamil Mahajan



**National College of Ireland**

**Project Submission Sheet**

|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name:** | Eoin Fitzsimons | | |
| **Student ID:** | X23151374 | | |
| **Programme:** | Computing | **Year:** | 3 |
| **Module:** | Security Fundamentals | | |
| **Lecturer:** | Kamil Mahajan | | |
| **Submission Due Date:** | 15-11-24 | | |
| **Project Title:** |  | | |
| **Word Count:** |  | | |

**I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.**

**ALL internet material must be referenced in the references section. Students are encouraged to use the Harvard Referencing Standard supplied by the Library. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action. Students may be required to undergo a viva (oral examination) if there is suspicion about the validity of their submitted work.**

|  |  |
| --- | --- |
| **Signature:** | ……………………………………………………………………………………………………………… |
| **Date:** |  |

**PLEASE READ THE FOLLOWING INSTRUCTIONS:**

1. Please attach a completed copy of this sheet to each project (including multiple copies).

2. Projects should be submitted to your Programme Coordinator.

3. **You must ensure that you retain a HARD COPY of ALL projects**, both for your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer. Please do not bind projects or place in covers unless specifically requested.

4. You must ensure that all projects are submitted to your Programme Coordinator on or before the required submission date. **Late submissions will incur penalties.**

5. All projects must be submitted and passed in order to successfully complete the year. **Any project/assignment not submitted will be marked as a fail.**

|  |  |
| --- | --- |
| **Office Use Only** | |
| Signature: |  |
| Date: |  |
| Penalty Applied (if applicable): |  |

**AI Acknowledgement Supplement**

1. **[Insert Module Name]**
2. **[Insert Title of your assignment]**

|  |  |  |
| --- | --- | --- |
| **Your Name/Student Number** | **Course** | **Date** |
|  |  |  |

This section is a supplement to the main assignment, to be used if AI was used in any capacity in the creation of your assignment; if you have queries about how to do this, please contact your lecturer. For an example of how to fill these sections out, please click [here](https://libguides.ncirl.ie/useofaiinteachingandlearning/studentguide).

1. **AI Acknowledgment**

This section acknowledges the AI tools that were utilized in the process of completing this assignment.

|  |  |  |
| --- | --- | --- |
| **Tool Name** | **Brief Description** | **Link to tool** |
|  |  |  |
|  |  |  |

1. **Description of AI Usage**

This section provides a more detailed description of how the AI tools were used in the assignment. It includes information about the prompts given to the AI tool, the responses received, and how these responses were utilized or modified in the assignment. **One table should be used for each tool used**.

|  |  |
| --- | --- |
| **[Insert Tool Name]** | |
| [Insert Description of use] | |
| [Insert Sample prompt] | [Insert Sample response] |

1. **Evidence of AI Usage**

This section includes evidence of significant prompts and responses used or generated through the AI tool. It should provide a clear understanding of the extent to which the AI tool was used in the assignment. Evidence may be attached via screenshots or text.

1. **Additional Evidence:**

[Place evidence here]

1. **Additional Evidence:**

[Place evidence here]

**Overall page limit – 5 pages per member in a group (excluding front pages and references/annexure)**

1. **Contributions of each member of the Group**

Describe the contribution or tasks of each member of the group (e.g., investigation, testing, coding of the application like GUI or cryptographic mechanisms, etc.).

|  |  |  |
| --- | --- | --- |
| **StudentID** | **StudentName** | **Tasks** |
|  |  |  |
|  |  |  |
|  |  |  |

1. **Link to the demo video**

This is a link to a 5-minute video demonstrating the application and a quick walkthrough of the code. Make sure the video has the appropriate permissions to be accessed.

1. **Link to the GitHub project (Make sure the accessibility is public)**

This is a link to your GitHub project which contains the source code of your application.

1. **Link to the Source GitHub project (If extending existing project)**

This is a link to your GitHub project containing the original application's source code. In this case, highlight the changes in the README of your contribution in your GitHub project link of #3.

1. **Manual**

Describe the instructions to download, install and run your application.

1. **Summary of the Application**

**Chosen Use Case Scenario:** [ID and name]

**5.1 Business Functionality**

Briefly describe the purpose of the application and what is the value offered by it in terms of functionality and features present. Illustrate with use cases as appropriate.

If you are using an existing source code as the basis for your project, clearly indicate it here describing its provenance (where the code comes from) and what were the modifications/novel parts or contributions to this specific project.

* 1. **Design of the Application**

Create a diagram that illustrates the architecture of your application (including inputs, outputs, and main components like GUI, databases, etc.). Also include a diagram that illustrates the application's operating process (e.g., using flowcharts, activity diagrams, sequence diagrams).

* 1. **Technical Implementation**

Describe how you implemented technically the application. Discuss any technologies involved, programming languages, libraries, and other algorithms with emphasis on the cryptography mechanisms used (elaborate on how the mechanism is used in the use case and provide a rationale for choosing those specific mechanisms).