# Coursework Report – 5COSC019C Object Oriented Programming

Student Name: Sandeepa Induwara Samaranayake

Student ID: 20210302

|  |  |  |
| --- | --- | --- |
| Have you submitted the video with the demonstration of your system? | Yes | No |

Video demonstration link - <https://drive.google.com/drive/folders/1GAij6qhBHKwMxUyu2yLj3Jxjr-QOPVxC?usp=sharing>

**Phase 1 – Design and classes implementation**

|  |  |  |
| --- | --- | --- |
| **Task** | **Did you attempt the task?** | **Student’s comments** (To which extent you implemented the task? Have you encountered any problems or issue?) |
| Design a UML Use Case Diagram of your system (submitted in a separate file). | Yes  No | Completed( Submitted in a separate .PNG file) |
| Design a UML Class Diagram of your system (submitted in a separate file). | Yes  No | Completed( Submitted in a separate .PNG file ) |
| Implementation Class Person | Yes  No | Completed |
| Implementation Class Doctor | Yes  No | Completed |
| Implementation Class Patient | Yes  No | Completed |
| Implementation Class Consultation | Yes  No | Completed |
| Implementation Interface WestminsterSkinConsultationManager | Yes  No | Completed |

**Phase 2 – Console menu implementation**

|  |  |  |
| --- | --- | --- |
| **Task** | **Did you attempt the task?** | **Student’s comments** (To which extent you implemented the task? Have you encountered any problems or issue?) |
| Add a doctor in the system with all the relative information (max 10 doctors) | Yes  No | Completed |
| Delete a doctor from the system selecting the medical licence number. Display a message to confirm he/she has been removed and the total number of doctors in the centres. | Yes  No | Completed |
| Print on the screen the list the doctors in the centre with all the relative information. The list should be ordered alphabetically. | Yes  No | Completed |
| Save in a file entered by the user so far. The user should be able to load back the information running a new instance of the application. | Yes  No | Completed |

**Phase 3 – GUI Implementation**

|  |  |  |
| --- | --- | --- |
| **Task** | **Did you attempt the task?** | **Student’s comments** (To which extent you implemented the task? Have you encountered any problems or issue?) |
| Doctor list visualisation. Sorting alphabetically. | Yes  No | Completed |
| The user can select a doctor and add a consultation. | Yes  No | Completed |
| In the consultation the user can add all the patient details. | Yes  No | Completed |
| The user can select the date/time of the consultation considering that a doctor cannot have more than one consultation at the time. | Yes  No | Completed |
| The user can enter and save the cost for the consultation. (£25 per hour and only the first one £15). | Yes  No | Completed |
| The user can add some notes (text information or images). This information has been encrypted. | Yes  No | Completed (An encrypted Microsoft Access database has been used to store all program data. Since MS Access uses powerful encryption algorithm to encrypt databases no need to use another encryption API.) |

**Phase 4 – Testing and system validation**

|  |  |  |
| --- | --- | --- |
| **Task** | **Did you attempt the task?** | **Student’s comments** (To which extent you implemented the task? Have you encountered any problems or issue?) |
| Test plan. (Submitted in a separate file). | Yes  No | Completed |
| Implementation of an automated unit test for each scenario in the console menu. | Yes  No | Completed |
| Error Handling across all the code, input validation and code quality. | Yes  No | Completed( Used Regular expressions to validate all user inputs ) |