Smart Medical Management System Work Breakdown Structure

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| **Level** | **WBS Code** | **WBS Code** | **Definition** |
| 1 | 1 | Smart Medical Management System | All work to complete a Smart Medical Management System. The system should handle the management of medical activities between health organisations and the corresponding stakeholders. |
| **2** | **1.1** | **Initiation and Planning** | **The work needed to initiate and plan for the project.** |
| 3 | 1.1.1 | Discuss and Setup Lines of Communication | Share details with other members to allow for efficient communication between group members. |
| 3 | 1.1.2 | Create GitHub Repository | One member to create private GitHub repository and add the remainder of the group as contributors. |
| 3 | 1.1.3 | Organise a Weekly Team Meeting | Informally discuss the days and times that members will be available to attend a weekly meeting and finalise this for the rest of term. |
| **3** | **1.1.4** | **DELIVERABLE: Take Belbin Self Perception Inventory** | **All members are required to take the Belbin Self Perception Inventory and provide results to other members though GitHub.** |
| 3 | 1.1.5 | Belbin Discussion and Role Assignment | Meet with all team members to discuss findings from Belbin Self Perception Inventory and assign team members their role. |
| **3** | **1.1.6** | **DELIVERABLE: Justification Report of Role Allocation** | **Write up the justification of why certain roles were given or not given to certain individuals.** |
| 3 | 1.1.7 | Create Initial Trello Board | Create and invite all team members to the Trello Board and start to initially flesh out the tasks and who will be assigned to them. |
| **3** | **1.1.8** | **DELIVERABLE: Define Focus Questions** | **As a team discuss the focus questions and scope of those questions before creating the Concept Map.** |
| **3** | **1.1.9** | **DELIVERABLE: Create Initial Project Concept Map** | **Using the agreed upon focus questions start to create the Project Concept Map.** |
| 3 | 1.1.10 | Create initial Ontology | Using the information provided in the scenario and other information gathered so far start to look at how all these things are interconnected. |
| 3 | 1.1.11 | Discuss Risk Analysis Techniques | Read about Risk Analysis techniques and discuss the pros and cons with other team members. |
| **3** | **1.1.12** | **DELIVERABLE: Justification of Adopted Risk Analysis Technique** | **Write up the justification of why a Risk Analysis technique was chosen and why others were not.** |
| 3 | 1.1.13 | Discuss Project Risks | Discuss with other members the potential risks that could happen during the duration of the project. |
| **3** | **1.1.14** | **DELIVERABLE: Create Initial Risk Analysis Table** | **Using the adopted risk management technique and the risks put forward by team members. Create and finalise the risk analysis table.** |
| **3** | **1.1.15** | **DELIVERABLE: Create Initial Gantt Chart** | **Using the work breakdown structure and team roles create the Gantt chart that will be used by team members to know what they should be working on.** |
| **3** | **1.1.16** | **DELIVERABLE: Create Initial WBS Directory** | **Using the Assessment Guide on Deliverables create the Work Breakdown Structure Table.** |
| **3** | **1.1.17** | **DELIVERABLE: Create WBS tree diagram** | **Using the Work Breakdown Structure Table create the tree version of the diagram.** |
| **3** | **1.1.18** | **DELIVERABLE: Create Initial PERT Chart** | **Using the WBS and Gantt Chart create a PERT diagram to show visually how the project will flow.** |
| 3 | 1.1.19 | Discuss Critical Paths for The Project | After completing the individual task, discuss the project's Critical Paths. |
| 3 | 1.1.20 | Create Initial Activity Network Diagram | After discussion is complete, create an Activity Network Diagram for the project highlighting the critical paths. |
| 3 | 1.1.21 | Discuss System Requirements | Talk with all team members about what the system can do and what of those things will be feasible. |
| 3 | 1.1.22 | System Requirements List | Create a list of the systems requirements to talk to the customer about. |
| 3 | 1.1.23 | Discussion About Moving to Next Phase | Discuss with all group members to see if all work is completed and if we are now ready to move onto the next phase. |
| **2** | **1.2** | **Analysis** | **The work needed to analyse the new system.** |
| 3 | 1.2.1 | Discuss System Requirements | Discuss as a team the system requirements using the provided scenario and other information given to us by the client. |
| **3** | **1.2.2** | **DELIVERABLE: Develop System Requirements Document** | **Document all system requirements brought up in the group discussion.** |
| 3 | 1.2.3 | Discuss Development Methodologies | Read about Development Methodologies discuss the pros and cons with other team members. |
| **3** | **1.2.4** | **DELIVERABLE: Justify Development Methodology** | **Document the chosen methodology and state why other methodologies were not chosen.** |
| 3 | 1.2.5 | Discuss Use Case Diagram | Once completed, discuss the Use Case Diagram with the team to make sure that all members are on the correct page. |
| **3** | **1.2.6** | **DELIVERABLE: Create Use Case Diagram** | **Using the System Requirements developed in the group discussion create the Use Case Diagram.** |
| **3** | **1.2.7** | **DELIVERABLE: Create Storyboard** | **Use all the other documentation provided to create the Storyboard for the project.** |
| **3** | **1.2.8** | **DELIVERABLE: Create Class Diagram** | **Use NetBeans to generate the final class diagram for the project.** |
| **3** | **1.2.9** | **DELIVERABLE: Create Domain Models** | **Use all the other documentation provided to create the Domain Model for the project.** |
| **3** | **1.2.10** | **DELIVERABLE: Create Robustness Diagram** | **Using the Use Case Diagram to create the Robustness Diagram.** |
| **3** | **1.2.11** | **DELIVERABLE: Create Sequence Diagram** | **User the Use Case Diagram and Robustness Diagram to create the Sequence Diagram.** |
| 3 | 1.2.12 | Discussion About Moving to Next Phase | Discuss with all group members to see if all work is completed and if we are now ready to move onto the next phase. |
| **2** | **1.3** | **Design** | **The work needed to design the new system.** |
| 3 | 1.3.1 | Discuss Architecture Design Techniques | Read about Architecture Design techniques and discuss the pros and cons with other team members. |
| **3** | **1.3.2** | **DELIVERABLE: Justify Architecture Design Technique** | **Create documentation showing the Architecture Design.** |
| 3 | 1.3.3 | Discuss User Interface Design | Using the Storyboard created in the Analysis phase create a design for the user interface. This should include a design of every window seen by the end user. |
| **3** | **1.3.4** | **DELIVERABLE: Create User Interface Design Documentation** | **Create documentation showing the designs for the user interfaces.** |
| 3 | 1.3.5 | Discussion About Moving to Next Phase | Discuss with all group members to see if all work is completed and if we are now ready to move onto the next phase. |
| **2** | **1.4** | **Implementation** | **The work needed to implement the project.** |
| 3 | 1.4.1 | Discuss International Coding Standards | Read about International Coding Standards and discuss with other team members. |
| **3** | **1.4.2** | **DELIVERABLE: System Codes Reflecting International Coding Standards** | **Create documentation about the coding standards that this project will use and make this available to all team members.** |
| **3** | **1.4.3** | **DELIVERABLE: System Codes on GitHub** | **Show the use of system codes on GitHub.** |
| 3 | 1.4.4 | Divide Up Coding Tasks Between Members | Divide all the required coding up between all members of the team being sure to use each member strengths to get the work done. |
| **3** | **1.4.5** | **DELIVERABLE: Working Program/Project** | **Provide a working code project to the client.** |
| 3 | 1.4.6 | Discuss Development Progress | Discuss the current state of development on the project with all team members. |
| **3** | **1.4.7** | **DELIVERABLE: Unit Testing Code** | **Make sure that all units have a set of unit tests that can be automatically run.** |
| **3** | **1.4.8** | **DELIVERABLE: Create Test Plan** | **Create detailed test plan for all the Use Cases outlined in the Analysis phase.** |
| **3** | **1.4.9** | **DELIVERABLE: Document Results of Test Plan** | **Run the completed test plan and document the results for the client.** |
| 3 | 1.4.10 | Discussion About Moving to Next Phase | Discuss with all group members to see if all work is completed and if we are now ready to move onto the next phase. |
| **2** | **1.5** | **Maintenance and Support** | **The work needed to maintain and support the software.** |
| 3 | 1.5.1 | Discuss and Divide Up Tasks | Discuss and divide up all tasks amongst the team members. |
| **3** | **1.5.2** | **DELIVERABLE: Create User Guide** | **Create a detailed user guide on the systems features and how to navigate around it.** |
| **3** | **1.5.3** | **DELIVERABLE: Create Developer Guide** | **Create a detailed developer guide containing all the information required to allow the product to be repaired by another team of software engineers.** |
| 3 | 1.5.4 | Discussion About Ending the Project | Discuss with all group members to see if we are now ready to deliver the project to the client. |