## Smart Medical Management System Work Breakdown Structure

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.

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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	DELIVERABLE: Create Use Case Diagram	Using the System Requirements developed in the group discussion create the Use Case Diagram.
3	1.2.6	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	1.2.7	DELIVERABLE: Create Robustness Diagram	Using the Use Case Diagram to create the Robustness Diagram.
3	1.2.8	DELIVERABLE: Create Sequence Diagram	User the Use Case Diagram and Robustness Diagram to create the Sequence Diagram.
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 Class Diagram	Use NetBeans to generate the final class diagram for the project.
3	1.2.11	DELIVERABLE: Create Storyboard	Use all the other documentation provided to create the Storyboard for the project.
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.