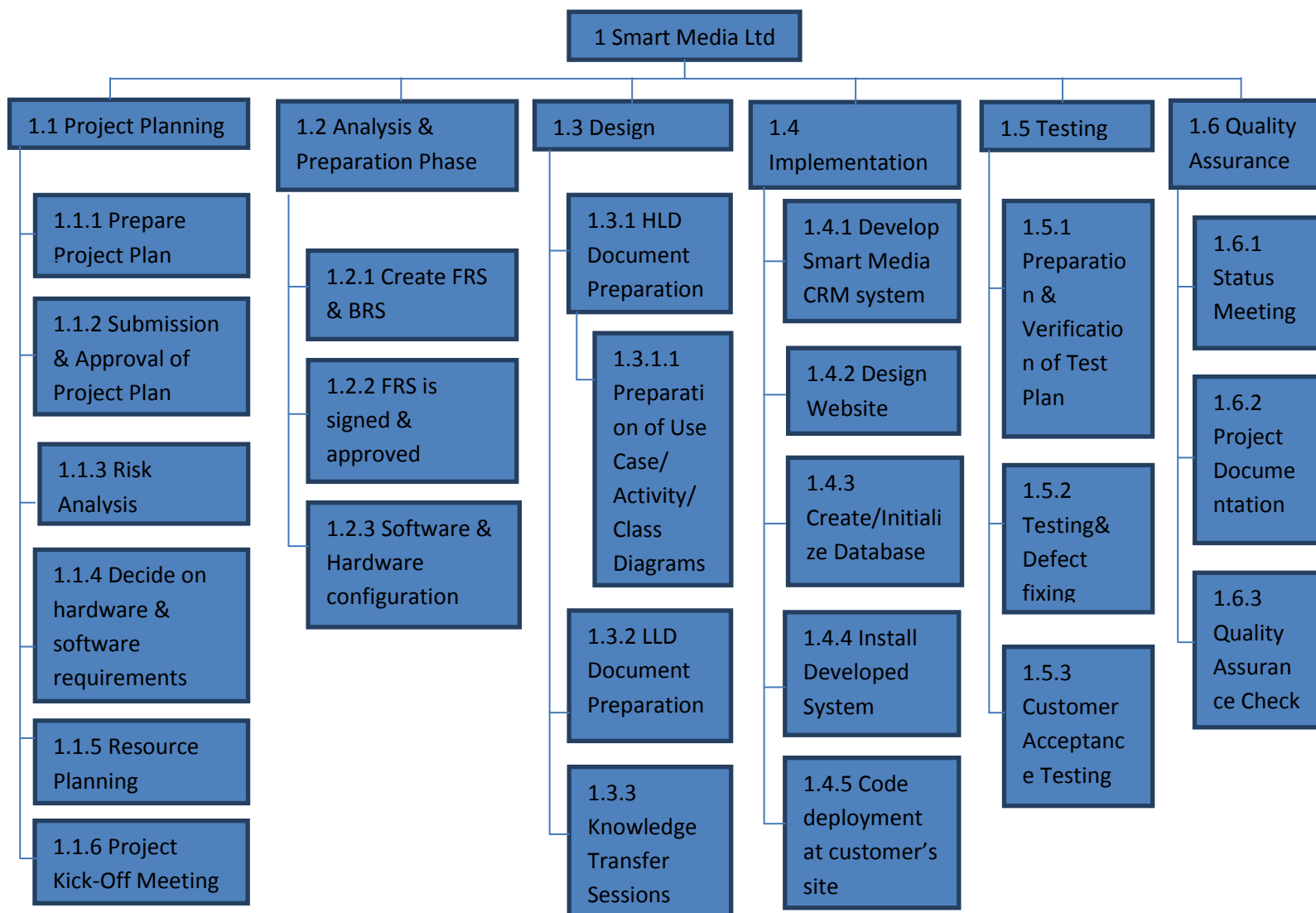


## **Work Breakdown Structure: -**

The work breakdown structure prepared for Smart Media Ltd consists of high level tasks which are required to implement the project within the estimated deadline and budget. In order to make the work breakdown structure precise & clear, the tasks within the project lifecycle are not broken into subtasks. The tasks represented in the structure are the main tasks contributing to the total time limit of the project. The tasks mentioned in the work breakdown structure are broken down to the level which can be used to estimate time for itself and its sub-tasks as a whole.

The project “Smart Media Ltd” is categorized into the following six main sections –

- 1} Project Planning
- 2} Analysis & Preparation Phase
- 3} Design
- 4} Implementation
- 5} Testing
- 6} Quality Assurance



WBS Dictionary – The WBS dictionary contains all the details of the tasks which are necessary to implement the project successfully. It contains a very brief description of each task which is defined in the WBS. The tasks listed are associated with a mini scope. The dictionary describes the functionality which will be covered by the task during the project life-cycle.

Level	WBS Code	Element Name	Definition
1	1	Smart Media Ltd	The system which will be implemented after all tasks are performed.
2	1.1	Project Planning	The planning phase before any work on the project actually begins. The project plan is prepared by the management team which takes into consideration various parameters like team size, experience, capabilities, and drawbacks when preparing the plan for the project.
3	1.1.1	Prepare Project Plan	The actual planning takes place during this task.
4	1.1.2	Risk Analysis	The management teams along with the technical architects/business analysts have a meeting to understand the risks associated with the implementation of the requirements. If there are any concerns encountered then these concerns are reported to the customer and a decision is made whether to include these requirements in this part of the implementation.
5	1.1.3	Submission & Approval of Project Plan	After the project plan is in place, the same is sent to the customer for approval. The management team then receives the approved plan from the customer with suggestions/feedback/changes.
6	1.1.4	Decide on hardware & software requirements	This is another aspect which is considered during preparing the project plan. The management team decides on what software applications should be used to implement the project. Along with the software, the resources in terms of hardware are also decided and accounted for.
7	1.1.5	Resource Planning	As we assume we already have the requirements from the customer, the management team along with the technical architects will decide on the assignment of resources to particular requirements.
8	1.1.6	Project Kick-Off Meeting	The last phase of project planning phase would be to arrange a kick-off meeting. The kick-off meeting is generally hosted by the manager of the project team. He explains the team briefly about the project plan, milestones to achieve during the project life-cycle and motivates them to contribute positively to the project.
9	1.2	Analysis & Preparation Phase	This is the second main task to be performed during the project life-cycle of Smart Media Ltd. In this phase, the requirements are understood and documented by the technical architects. In addition to this task, the

			prerequisites for the project in terms of software and hardware are configured and made sure are in place.
10	1.2.1	Create FRS from BRS	Since, we have the business requirements from the customer already with us, we now start with the requirement understanding phase. Here, the technical architects/business analysts study the Business Requirement Specification (BRS) document and convert them into the Functional Requirement Specification (FRS) document. The FRS has a detailed explanation about all the requirements which need to be implemented for a successful release of the project.
11	1.2.2	FRS is signed & approved	After the task of converting BRS into FRS is done, the technical architects/business analysts send the FRS to the customers for approval. This task is performed in order to make sure that the requirements stated by the customer are understood correctly and there is no misunderstanding. After the FRS is approved by the customers, the document is sent back with changes/suggestions/feedback.
12	1.2.3	Software & Hardware configuration	In this task, the software and hardware required to implement the project are now configured and put in place, so that the development and test team can start working on their individual tasks.
13	1.3	Design	The design phase contains the tasks which are performed by the business analysts/technical architects. The tasks which are usually performed are preparation of the HLD (High Level Design) and LLD (Low Level Design) documents.
14	1.3.1	High Level Design Document Preparation	During this task, the technical architects/business analysts prepare the high level design document which consists of the bird eye's view of the functionality to be implemented. The documents prepared are usually PowerPoint presentations, which gives the developers & test team the rough idea about the functionality to be implemented.
15	1.3.1.1	Preparation of Use Case/ Activity/ Class Diagrams	This is sub task of the previous task. The business analysts prepare the use case diagrams, activity and class diagrams which will later on be used by them in the knowledge transfer sessions for explaining the functionality of the system to be implemented
16	1.3.2	Low Level Design Document Preparation	This task is concerned with the creation of the detailed technical design document which is prepared by the development team. The documents are usually prepared using spread sheets and they contain the most specific details of what changes are going to be made in order to implement the functionality. They contain details like which applets will be modified, created. The details of

			the tables which will be created. The addition of the columns to the table if any required.
17	1.4	Implementation	This task deals with the development phase of the project and consists of important tasks which form the foundation of the project.
18	1.4.1	Develop Smart Media CRM system	The management team has made a decision to use CRM package offered by Oracle CRM for the development of Smart Media CRM system. In this task, the development team works closely with the business analysts/technical architects to develop and customize the CRM system.
19	1.4.2	Website Design	The website for Smart Media which is presented to the customers is also another important aspect of this project. Developers from our team will be using JDeveloper to create this website which in turn will be connected to the CRM system.
20	1.4.3	Create /Initialize Database	In order to support the front end systems i.e. the website and the CRM system, there will a database implemented using Oracle 11g package. This task involves creation of tables, customizing existing tables and setting up the required JDBC connection in order to setup the development environment.
21	1.4.4	Install Developed System	This task is generally followed after the development of the environment as a whole i.e. the creation of website, CRM system and the database tables. After all these components of the system are in place and integrated, then the system as a whole is now ready to be handed over to the test team for further action.
22	1.4.5	Code deployment at customer's site	This is another important task under implementation phase which deals with the process of deploying the developed application in its entirety at the customer's location. This task is normally followed after all forms of testing and bug fixing activities are completed and the customer is now ready to perform acceptance testing before going live with this implementation.
23	1.5	Testing	A major portion of the project lifecycle is occupied by the testing phase. The testing phase assures the team that the system developed, provides and fulfills the requirements which were proposed by the customer.
24	1.5.1	Preparation & Verification of Test Plan	The testing phase begins with the preparation of the test cases which are a part of the test plan. The test plan is a group of test cases which cover test scenarios for different functionalities. The preparation of the test plan begins after the test teams has finished attending the knowledge transfer sessions and have built their understanding of the module they are going to test.
25	1.5.2	Testing & Defect fixing	This task comprises of all the different types of testing performed on the system in order to maintain its

			integrity, consistency, requirement coverage and scalability. This task of testing runs in parallel with the task of defect fixing. The project follows the iterative model and whenever a defect is found during the testing phase, it is immediately fixed.
26	1.5.3	Customer Acceptance Testing (CAT)	The testing which is performed by the customer before the system goes live is the customer acceptance testing. This testing begins after the project team has performed all the testing from their end and the application is ready to be shipped to the customer for CAT.
27	1.6	Quality Assurance	Quality Assurance deals with maintaining the quality of the project which involves tasks like auditing data, project documentation and status meetings. There are various processes followed by organizations depending upon the complexity of the project.
28	1.6.1	Status Meetings	During the entire duration of the project, in order to track progress and address issues or concerns of the team members from various teams in the project, team meetings are held by module leads. The meetings are formal/informal depending upon the nature of the issue being discussed.
29	1.6.2	Project documentation	The project documentation is a task which usually consists of all the documents which are created during the project life-cycle, right from the project plan by the project manager, to the high level design documents to the test plan from the test team. During this task, the administrative team makes sure that a package consisting of all these important documents is prepared.
30	1.6.3	Quality Assurance Check	This task is performed by the QA team in the project who is responsible for checking whether the deliverables which will be given to the customer prior to Go-Live are of the highest quality.