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| **Key Concepts** | **Relevance** | **Real World**  **Contexts** | **Interdisciplinary**  **Connections** | **Critique** | **Technology,Tools and Test Cases** | **Project**  **Management** | **Project Sketch** |
| **Introduction to**  **Software**  **Development**  **Life Cycle** | This is an important framework which will brief us about how we will be proceeding with the project for the development of the software | Developers and all professional software companies are expected to follow this life cycle model for better functioning | This can be used  for any project as  all the projects go  through a life  cycle that needs to  be met at the  Various stages.  This helps in  keeping track of  the progress of the  Project. | This helps the team members in mapping out the path of the project but chances can fail as members might not take it seriously | Github,creately,  Android studio ver.2.2, creately, erdplus, excel, google drive, google docs. | Planned to follow the life cycle on September 3rd,2016 | Started following the lifecycle and project completed by 30th november,2016 |
| **Various**  **Software**  **Development**  **Methodologies** | Waterfall model:-as the requirement changes and constant testing is required so waterfall model is not required  Prototype model:-this app is designed by taking feedback from the customers and then worked upon.so prototype model is also not applicable  Spiral model:-interaction is not performed with the customer after the completion of every development process hence it is not applicable  Incremental model:-this is the most efficient model as the work is done sequentially .the work is incremented in stages after the completion of one part then to another  RAD:-not applicable as there is no sufficient human resources | Incremental  Model is used in  shrink-wrap large  applications and  systems which  built-in small  phases or  Segments.  Shrink Wrap  Applications like  Food and  Beverage Apps,  Printing &  Publication Apps | Its lower initial deliver cost its quick working od software during sdlc period, client involvement and easy to test and debug during smaller iterations are the factors which made us choose incremental model | Disadvantages of this model:-Needs good planning and design .Needs a clear and complete definition of the whole system before it can be broken down and built incrementally. Total cost is higher than waterfall | Self-analysis through the available knowledge |  |  |
| Software requirement specification |  |  |  |  |  |  |  |
| Problem analysis  Requirement specification  Validation:- | Our main purpose is to provide a low-level description of the marketing guide application, known as The Modern Marketer. This document provides insight into the structure, as well as a picture of what has gone into the design of each component. This will be handy to many businesses to brand their business online through our app.  simple UI |  |  |  |  |  |  |
| **System Design**  **-** Abstraction  Modularity  Coupling  Cohesion  Top-down design | -Abstraction is an  important design  tool as it extracts  only the relevant  information and  Ignores the rest.  Modularizing a  design helps to plan  the development in  more effective  Manner.  -Coupling is helpful  to measure the level  of  inter-dependability  Among modules.  Cohesion is helpful  to measure the level  of intra-dependability  within elements of  Module.  It is easy to  implement as  compared to  Bottom-up design. | -It is necessary  for developers  for hiding  irrelevant details  so that  one can focus on important things at a time  -  It is necessary as  it helps in testing  and debugging  Effectively.  -It is necessary as  it tells at what  level the  modules interact  with each other  -It is necessary as  it decides how  well modules fits  Together.  -It is necessary as  we know our  requirements  Beforehand. | It allows to  control the  complexity of  design process by  proceeding from  abstract design model to concrete design model  It allows the easy  maintenance  without affecting  the functionality  of the software  If we need only  one field of record  then there is no  need to pass all  The records.  -Thorough  knowledge of the  functionality of  every component  Is required.  Requirements  should be clear to  the developer then  only one can  proceed | -Can use it without  knowing how it is  Implemented.  Some important  components can  be left out  -Greater the  number of  modules, greater  will be the effort to  integrate them  Lower coupling  will lead to better  Program.  -Higher coupling  will lead to better  Program.  It is usually more  effective for  smaller programs | Android Studio v2.2,  Photoshop.  Create.ly  Self-analysis |  |  |
| Coding  Top-down programming  -Structured  Programming  -Information  Hiding | -Modules at the top  level performs general tasks and  proceed to other  modules to perform  particular task  -It is helpful when  we need some  repetitive tasks in our  Program.  -It is used to  minimize the  complexities among  different modules of  Software. | -Program is  broken into smaller modules  so it is easy to  trace a particular  segment of code  in software  program  -It helps in  reducing  statements,  multiple exit and  entry points  from the  Program.  -It focuses on  hiding  non-essential  details of  function in a  program so that  they are  inaccessible to  other  components of  the software. | -It makes the  functions and procedures  globally visible  It makes the  software code easy  to modify when  Required.  -After using  information  hiding, modules  are connected  with a specific  section of  program and not  the whole  Program. | -There is a risk of  implementing data structures as  modules are  dependent on each  Other.  -It is restricted to  top-down  approach of  Coding.  -Modules created  without using  information hiding  Affect other  Modules. | Self-analysis |  |  |
| **Software**  **Project**  **Management**  -Cost  Estimation  -Project  Scheduling  -Staffing  -Software  configuration  management  -risk  management  -quality  assurance | -Cost estimation is  an important aspect  as any project cannot  be made without it  being financially  Feasible.  - It is necessary to  come up with a  feasible schedule for  All the members.  -Hiring efficient and  right people for the  project is necessary  For staffing. | -All professional  companies chart  out the financial  feasibility of a  project before  proceeding with  it, hence, this is a  very important  Step.  -A schedule has  to be made to  complete the  project  efficiently with  optimum use of  Resources. | Understanding of  current business  scenario,  economics and  Finances is a must.  It helps in also  estimating costs  for other real life  Projects.  -It helps in  designing schedule  for other projects  As well. | HR members and  project team  members should  be well versed in  finances to use  resources  Optimally. | -Self Analysis | -Since we are using all  our own resources  and open source we  have not spent money  on the project, so the  only thing that needed  management was  Time. | Zero cost project. |
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