

Project Plan

STUDENT MANAGEMENT SYSTEM

Members:

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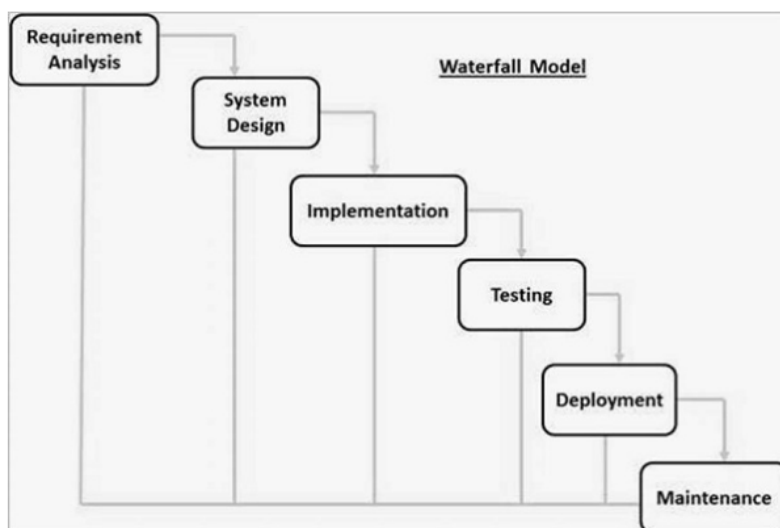
Setti Durga Poojitha:PES2UG20CS458

1: Identify the lifecycle to be followed for the execution of your project and justify why you have chosen the model.(Use Degree of certainty) . – **PES2UG20CS415 (ALHEENA MUJEEB)**

We use the software development lifecycle(SDLC). We follow the waterfall model to have clear understanding among team representative of when and what to do. Otherwise it would create chaos and project failure.

Reasons to follow waterfall model:

- 1)Project being implemented is short.
- 2)The requirements are constant and not changed regularly.
- 3)Tools and technologies used are consistent and are not changing.
- 4)The start and end points of each phase are fixed, which makes it easy to cover progress.



- Requirement Gathering and analysis – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document(SRS)

- System Design – The requirement specifications from first phase are studied in this phase and the system design is prepared.
- Implementation – With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- Integration and Testing – All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- Deployment of system – Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.

2: Identify the tools which you want to use throughout the lifecycle like planning tool, design tool, version control, development tool, bug tracking, testing tool-**PES2UG20CS415(Alheena Mujeeb)**

Planning tool,Bug tracking tool: Jira software , This is a work management, planning,bug tracking tool for all kind of use cases.

Design tool: Draw.io

Version control:Github

Development Tools: Mysql(Backend),Python(Project language)

3: Determine all the deliverables and categorise them as reuse/build components and justify the same-**PES2UG20CS458(Setti Durga Poojitha)**

1.LOGIN MODULE:

Users- Students and faculty

It consists of

- a)Front-end login page(re-use component,a login page template is being used)
- b)Data-base to store username and password(build component)

c)Functionality to validate username and password(re-use component)

2.Registration module:

Users-Admin

It consists of

a)Front-end page to register details of students and faculty.Also used to create registered id's for the users.(Re-use component,a design template is being used)

3.Attendance module:

Users-Faculty and students

a)Functionality to take attendance of the students by the faculty(It's a build component)

b)Functionality to view attendance by the students(It's a build component)

4.Assignment module

Users-Faculty and students

a)Functionality to assign assignments and view them after submission in the portal(Its is a build component)

b)Functionality to upload completed assignments in the given upload link(It is a build component)

5.Results module

Users-Faculty and students

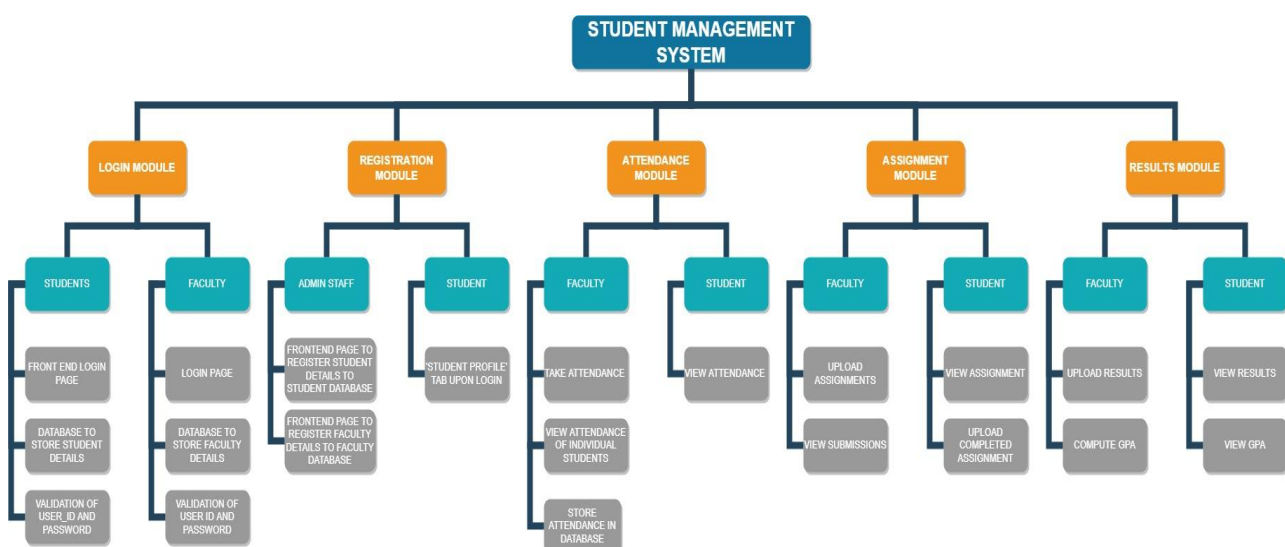
a)Functionality that enables teachers to upload results(It is a build component)

b)Functionality to view the results by the students(It is a build component)

The results will be retrieved from the database

4). Create a WBS for the functionalities in detail: **(PES2UG20CS419- Apoorva Anand Kulkarni)**

WORK BREAKDOWN STRUCTURE :



5: Do a rough estimate of effort required to accomplish each task in terms of person months.(Use BASIC COCOMO)

(PES2UG20CS455 - Safiya Nawar)

According to the Constructive Cost Model (COCOMO), the formula that relates Cost with Schedule is

$$P = KLOC / E$$

where, P=Productivity, KLOC = Kilo lines of code (the estimated size of the software product),

E= Effort (the total effort required to develop the software product, expressed in person months)

Assuming the value of KLOC to be 50 i.e, there are 50 kilo lines of code. Considering this is an Organic mode.

Effort = $a_1 * KLOC * a_2$ (PM), where $a_1=2.4$ and $a_2=1.05$

Effort = 3.0 (50) 1.12 PM

Therefore Effort = 126 PM

Productivity, $P = 50 KLOC / 126 PM = 0.396825 KLOC/PM = 396.825 LOC/PM$

6: Create the Gantt Chart for scheduling using any tool.

(PES2UG20CS455 - Safiya Nawar)

Using tool - Instagantt

