Project Plan Document

SOFTWARE ENGINEERING

UE20CS303

Online leave management system

GROUP NUMBER – 07

| TEAM MEMBERS:	SRN:
1)MURALI RAGHAVENDRA CS	PES2UG20CS440
2)CHETHAN	PES2UG20CS425
3)ANURAG	PES2UG20CS404

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)

(by,PES2UG20CS425 CHETHAN)

Waterfall model,

typically, the outcome of one phase acts as the input for the next phase sequentially.
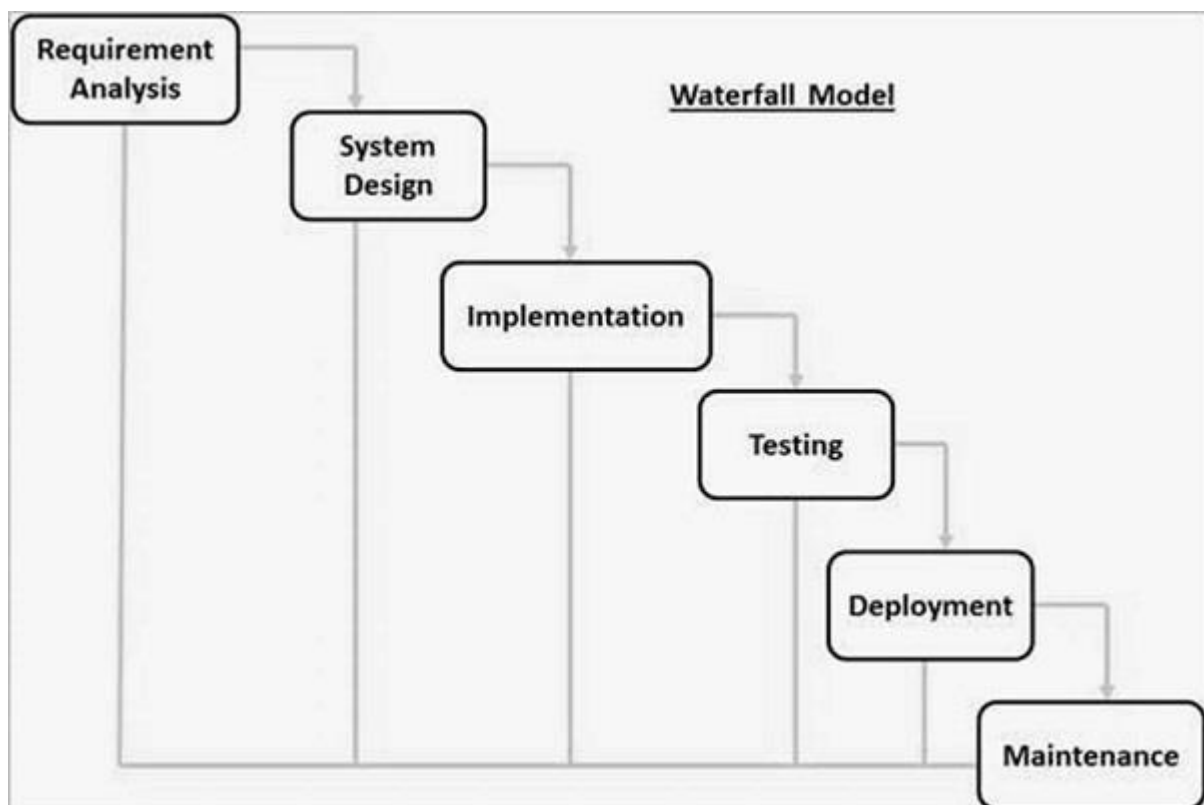
The sequential phases in Waterfall model are –

- **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.**
- **System Design – The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design**

helps in specifying hardware and system requirements and helps in defining the overall system architecture.

- 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.

- Maintenance − There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

- Requirements are very well documented, clear and fixed.
- Product definition is stable.
- Technology is understood and is not dynamic.
- There are no ambiguous requirements.
- Ample resources with required expertise are available to support the product.

- **The project is short.**

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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.

(by,PES2UG20CS440,MURALI)

Planning tool:Jira software

Design tool:lucid chart ,gantt pro

Workbench structure tool:draw.io

Version control:jira software

Development tool:jira software

Bug tracking:jira software

Testing tool:jira software,selenium

3: Determine all the deliverables and categorise them as reuse/build components and justify the same.

(by,PES2UG20CS404, ANURAG)

Deliverables (build)

Sign up page for new users

requesting for leave feature
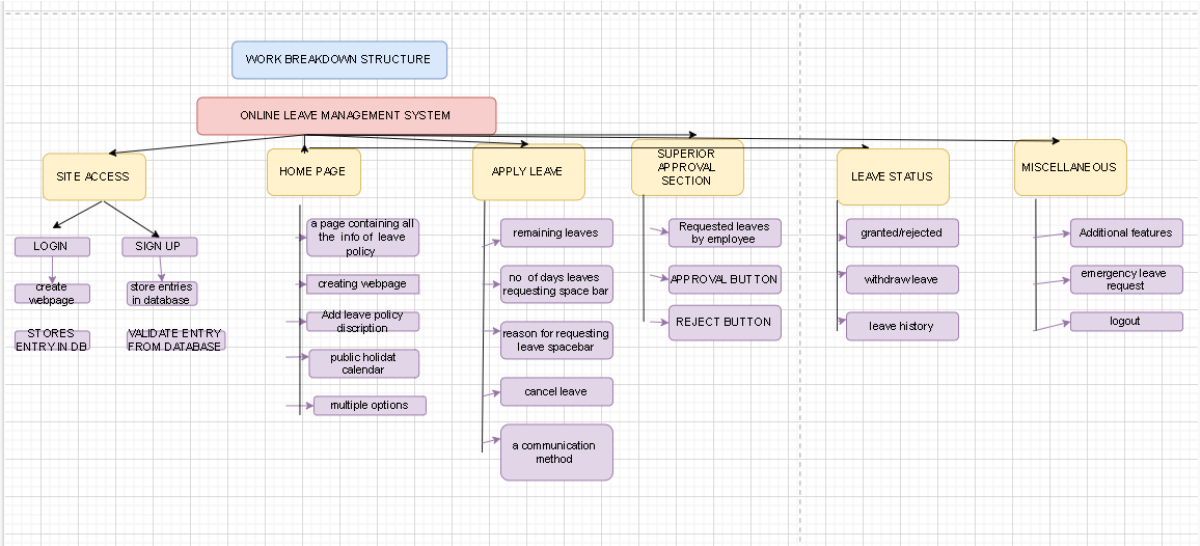
withdraw leave feature

Calculate total remaining leaves

Checking status

Deliverables (reuse)

Login page for registered users(resused from sign up page function)

Logout page(reused)

4. **Create a WBS for the entire functionalities in detail.(MURALI :PES2UG20CS440)**

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

.(MURALI :PES2UG20CS440)

The BASIC COCOMO Model for our project is:

Organic as the team size required is adequately small, the problem is well understood and has been solved in the past and also the team members have a nominal experience regarding the problem.

$$E = a(KLOC)^b$$

$$time = c(Effort)^d$$

$$Person required = Effort/time$$

Software Projects	a	b	c	d
Organic		2.4	1.05	2.5	0.38

Here we have taken the value of **KLOC as 2.**

Effort = 2.4 * (2) ^1.05

Effort = 4.96 persons month (PMs)

Time = 2.5*(4.96) ^0.38

Time = 4.59 months

Person required = 4.96/4.59 =1.08 =Approx= 2

But as in our project there are 3 members, therefore the time required would be

Time = 1.24 months (approximate for 3 people).

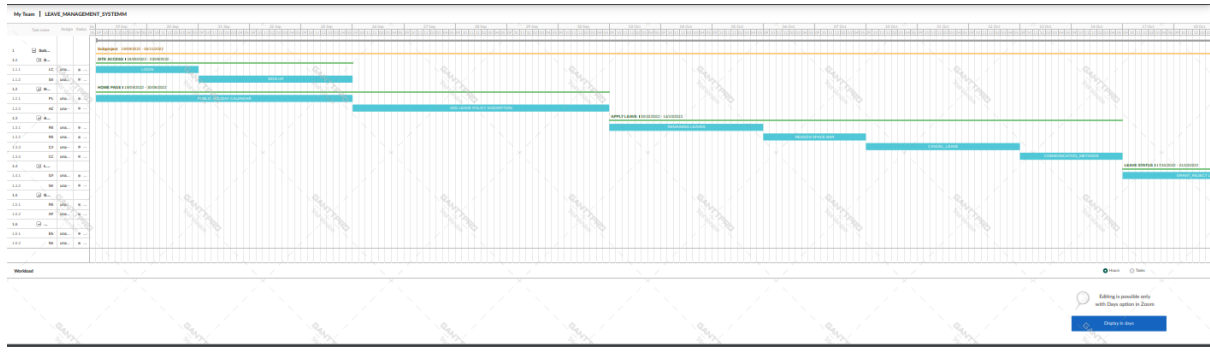**6:** Create the Gantt Chart for scheduling using any tool.

.(MURALI :PES2UG20CS440)

.(MURALI :PES2UG20CS440)

Task name		Assigned	Status			
1	⊟ Subproject					
1.1	⊟ SITE ACCESS					
1.1.1	LOGIN	unassigned	● Open			
1.1.2	SIGN UP	unassigned	● Open			
1.2	⊟ HOME PAGE					
1.2.1	PUBLIC HOLIDA…	unassigned	● Open			
1.2.2	ADD LEAVE POLI…	unassigned	● Open			
1.3	⊟ APPLY LEAVE					
1.3.1	REMAINING LEA…	unassigned	● Open			
1.3.2	REASON SPACE…	unassigned	● Open			
1.3.3	CANCEL_LEAVE	unassigned	● Open			
1.3.4	COMMUNICATIO…	unassigned	● Open			
1.4	⊟ LEAVE STATUS					
1.4.1	GRANT_REJEC…	unassigned	● Open			

Gantt chart:
- Subproject ׀ 19/09/2022 - 04/11/2022
- SITE ACCESS ׀ 19/09/2022 - 23/09/2022
- LOGIN
- HOME PAGE ׀ 19/09/2022 - 30/09/2022
- PUBLIC HOLIDAY CAL

	Task name	Assigned	Status	16 / 05
1.3	⊟ APPLY LEAVE			
1.3.1	REMAINING LEA…	unassigned	● Open	
1.3.2	REASON SPACE…	unassigned	● Open	
1.3.3	CANCEL_LEAVE	unassigned	● Open	
1.3.4	COMMUNICATIO…	unassigned	● Open	
1.4	⊟ LEAVE STATUS			
1.4.1	GRANT_REJEC…	unassigned	● Open	
1.4.2	WITHDRAW LEAVE	unassigned	● Open	
1.5	⊟ SUPERIOR_APPR…			
1.5.1	REQUESTED LE…	unassigned	● Open	
1.5.2	APPROVE/REJE…	unassigned	● Open	
1.6	⊟ MISCELLANEOUS			
1.6.1	EMERGENCY L…	unassigned	● Open	
1.6.2	New sub-task	unassigned	● Open	

Kindly click the link for more clear view;

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9fc3bf1bba35ff8f0292568405e3e22fcda23ea6c/900678