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School of Computer Science and Engineering (SCOPE)

WINTER Semester 2020-21

M.TECH (SE)

SWE2006 Software Project

ManagementSlot: A2

Faculty: Prof. K. Sathyarajasekharan

REVIEW-2

TITLE: SMART CRIMINAL RECORD TRACKER

TEAM MEMBERS

SURESH.M-18MIS1046
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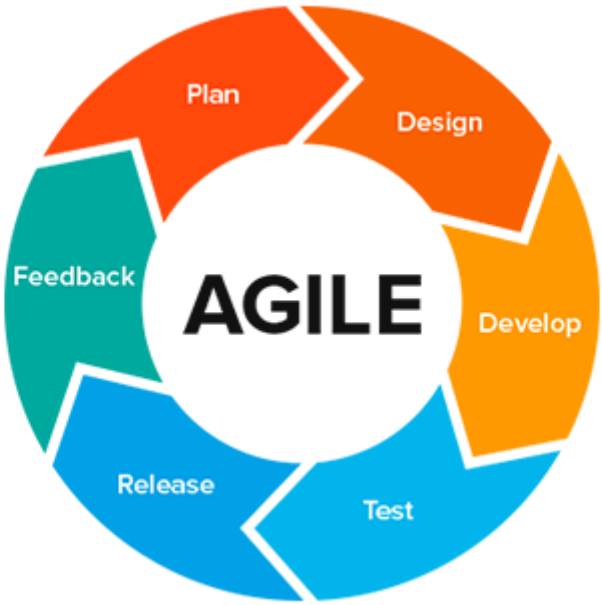
Life Cycle Model:

Agile SDLC model is a combination of iterative and incremental process models. We think this model is suitable as user requirements keep changing from time to time. More over Agile allows product owners to adjust requirements and priorities along the way to take advantage of opportunities and ultimately deliver a better product to all of the project stakeholders. The main motive to choose this model is to reduce the error as the modules gets tested thoroughly after each cycle. As this a small project and requirements are defined early, there is no need to do large changes in project in future. And Agile allows for team check-ins, testing, feedback, and updates to be made before the project ends - without starting all over.

Nowadays, each and every software tends to be updated again and again, keeping this point in mind Agile would work much better for our project. Another benefit of using this model is that this software can be developed in an incremental model module by module. Further the modules can be integrated one after another to create a newer version of the software. By doing this our software functions better and becomes more efficient to use.



As we are developing this project, the team doesn't have much experience and even the project is new to the market we need to work on all the points, constraints etc. to give out the best output. So, finally keeping all the points above in mind Agile model is much suitable to give better and efficient output for our project.

Step Wise Planning

Step 0: Select project

Assigned project is SMART CRIMINAL RECORD TRACKER

Step1: Establish Project Scope and Objectives

1.1 Identify objectives and measures of effectiveness

Objectives:

- The main aim of this project is to create a portal where police departments, advocate departments and CBI officers can access the data of every criminal all-over the world.
- It contains a database of each and every crimes of the particular criminal.
- It also has a feature of updating the crimes data of criminals by police departments, advocate and CBI departments day-to-day.
- This portal gives you a customized feel for every department involved in crime by accessing the data of a every criminal anywhere at any time.

1.2 Establish project authority

The project manager Suresh is the project authority

1.3 Identify all stakeholders in the project and their interests

- Users
- Project team
- Admin

1.4 Modify objectives in the light of stakeholder analysis

After stakeholder analysis, a new feature is added which shows the overall statistics of crimes committed by the prisoners and the statics of police, CBI and Advocate as well.

1.5 Establish methods of communication

A separate group session will be provided for police, advocate and CBI departments to communicate among themselves on a particular case.

So, it will help the case to solve the case easily of every criminal.

Step2: Establish Project Infrastructure

2.1 Identify relationship between the project and strategic planning

Need of the project: This saves a lot of time and effort of each department by providing all the information of a particular criminal.

2.2 Identify installation standards and procedures

This software is designed to be compatible which means it can used in any browser. It is user friendly and all the software standards will be followed while building this software

2.3 Identify project team organization

Project management roles:

Project Manager- Suresh.M

Front End -Sudheer.N

Analyst -Venkatesh.E

End Users - Criminal, CBI and advocate departments.

Step3: Analyse Project Characteristics

3.1 Distinguish the project as either objective-driven or product driven

It is an objective-driven project as the problem is stated but there could be more than one solution to solve this problem

3.2Analyse other project characteristics

It is a well-defined Information system which protects the data of every criminal. Since the data can access only by the official officers of government. For each officer will be a separate login. In today's world every one concern mainly about the privacy so, we strictly maintaining the privacy of data.

Identify high level project risks

The major problem in this project is the huge database which mightcause performance risk because of which the project might fail to produce results for some time before maintenance.

Take into account user requirements concerning implementation

All the user requirements including specifications details of every officers like Police, CBI and Advocate address all have been taken into consideration before implementing the project.

Select general lifecycle approach in the light of the above

Considering the fact that user requirements keep changing from time to time, we have chosen "**Agile Model**" as the development methodology. So iteratively we will incorporate any new features to be added in future updates.

Review overall resource estimates

As of now we have identified major risks and overall approach so even after re-estimating the required effort, the resources which areavailable are sufficient.

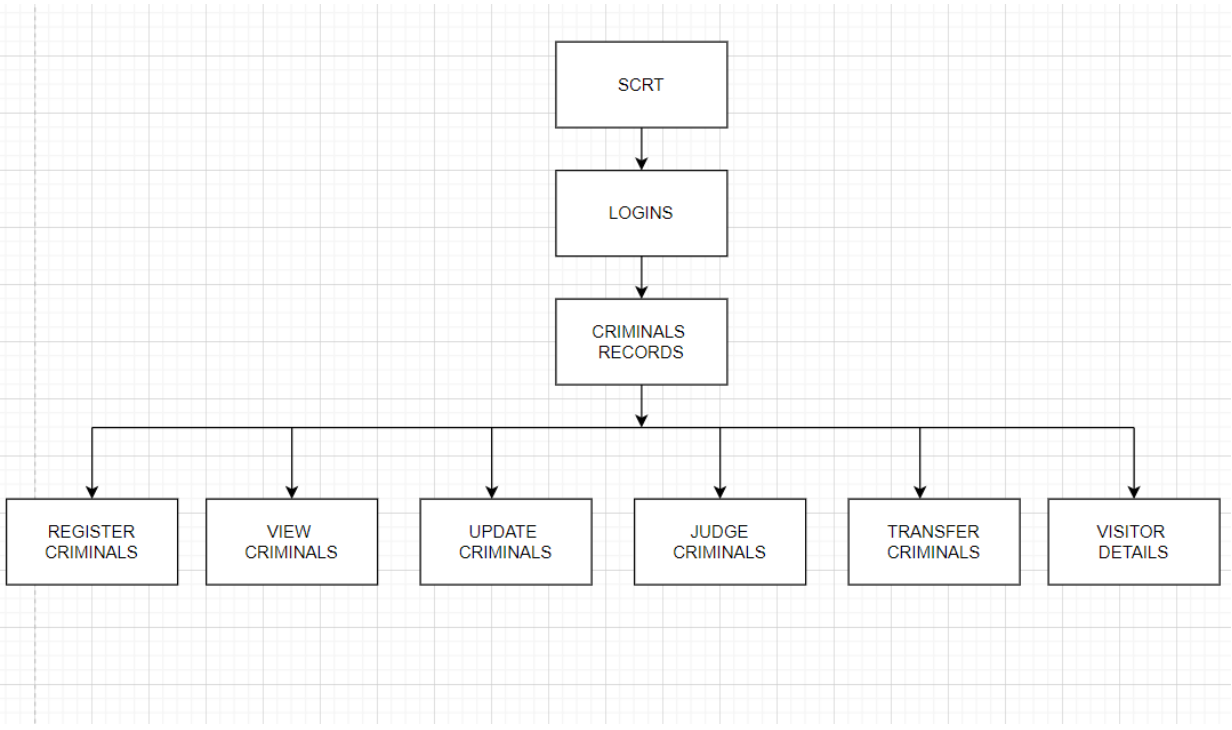
Step 4: Identify Project Products and Activities

4.1 Identify and describe project products

The relationship between products and the components is documented

here in the form of product-breakdown structure

4.2 Document generic product flow:



4.3 Recognize product instances

There are 4 modules which in turn has many sub modules

4.4. Produce ideal activity network

The above flow diagram describes how the system works withactivities and transformations.

4.5 Add check-points if needed

Here, check points need to be added during the step of user verification and check compatibility of product of previous activities.

Step 5: Estimate Effort for Each Activity

5.1 Carry out bottom-up estimates

Estimated effort: The effort needed is 4 members of staff who workfor full time each.

Elapsed time: If 4 members start and finish the work together, it takes about 80 days to finish.

5.2 Revise plan to create controllable activities

The complex activities such as gathering the crime activities of every criminal are broken down into sub-tasks to make the system feasible.

Step 6: Identify Activity Risks

6.1 Identify and quantify the risks of each activity

The co-ordination between members of project team is very crucial as there are limited members and any dropout results in high risk to collapse the modules if not properly planned.

S.NO	FEAUTURE	RISK
1	Less executive support	High
2	Communication gap among team members	High
3	Disputes between customer and project team	Low
4	Budget Estimation	Medium
5	Time Estimation	Medium
6	Scope ill Defined	Low
7	Political Issues	Medium

6.2 Plan risk reduction and contingency measures where appropriate

The communication between team members can be reduced by properinteraction and through guidance by project manager. All the others feature risks are moderate and no contingency measures required.

6.3 Adjust overall plans and estimates to take account of risks

Estimation of total risks can be done by iterating the above steps and new activities added if required.

Step 7: Allocate resources

7.1 Identify and allocate resources to activities

The project management team requires a web designer and aclient along with the project manager. All of them work together to build the system right from requirements to design, implementation and testing.

7.2 Revise plans and estimates to take into account resource constraints

In order to overcome this, there has to be alternative for important phases so that in case one is not available the others will do the job.

Step 8: Review/publicize plan

8.1 Review quality aspects of project plan

To ensure each activity is complemented we review all the quality aspects of the plan where we also test if all the activities are functioning properly.

8.2 Document plan and obtain agreement

Proper documentation of each and everything is done to make it easily understandable and feasible for reuse.

Step 9&10: Execute plan and create lower-level plans

Once the project is underway, plans need to be drawn in greater detailfor each activity to consistently improve the user experience and quality of the product. As our approach is iterative, we constantly repeat all the activities and perform necessary changes which are our lower-level plans. As the time approaches for particular activities to be carried out they will be re-planned in more details. Then we start executing the plan.