ಒಂದೇ ಪಾಲ್ಮೀಕಿ ಕೋಕಿಲಂ

ಹುನಗುಂದ ತಾಲೂಕಾ ಶ್ರೀ ಮಹರ್ಷಿ ವಾಲ್ಮೀಕಿ ನೌಕರರ ಕ್ಷೇಮಾಭಿವೃದ್ಧಿ ಸಂಘ.

ಹುನಗುಂದ - 587118 (ಜಿ: ಬಾಗಲಕೋಟ)

ಲಿ. ನಂ. 99/98-99

ಕಾರ್ಯದರ್ಶಿಗಳು

ಶ್ರೀ ಮುತ್ತಣ್ಣ. ಪಿ. ಪುದರಿ

ಶಿಕ್ಷಕರು

ಮೋ: 9448905666

ಉಲ್ಲೇಖ :..... ದಿನಾಂಕ :.....

(1) 1) What is project Planning.

→ Project Planning innvolves breaking down the work into parts and assign these to project team members,

The project plan, which is created at the start of a Project, is used to communicate how the work will be done to the project team and customers.

2) Define Refactoring.

→ Refactoring is the process of restructuring code, while not changing its original functionality. The goal of refactoring is to improve internal code.

3) Define system modeling.

→ system modeling is the process of developing abstract models of a system, with each model presenting a differ -ent view or perspective of that system.

ಮುದ್ರಣ ಸೇವೆ : ಶ್ರೀ ಪಂಕಜೇಶ. ವಿಠಲ. ಸಾಕಾ. ಅಧ್ಯಕ್ಷರು ಪುರಸಭೆ ಇಲಕಲ್, ಹಾಗೂ ಗಣಿ ಉದ್ದಿಮೇದಾರರು

4) UML
→ unified modeling language.

5) Formula to find 'Effort cost' by using Algorithmic cost modeling.

→ $\boxed{\text{Effort} = A \times \text{size}^B \times M}$

A is organisation-dependent constant, B reflects the disproportionate effort, M is multiplier reflecting product.

---

(2) * An external perspective, where you model the context or environment of system.

* An interaction Perspective where you model the interactions between a system and its environment, or between the components of a system.

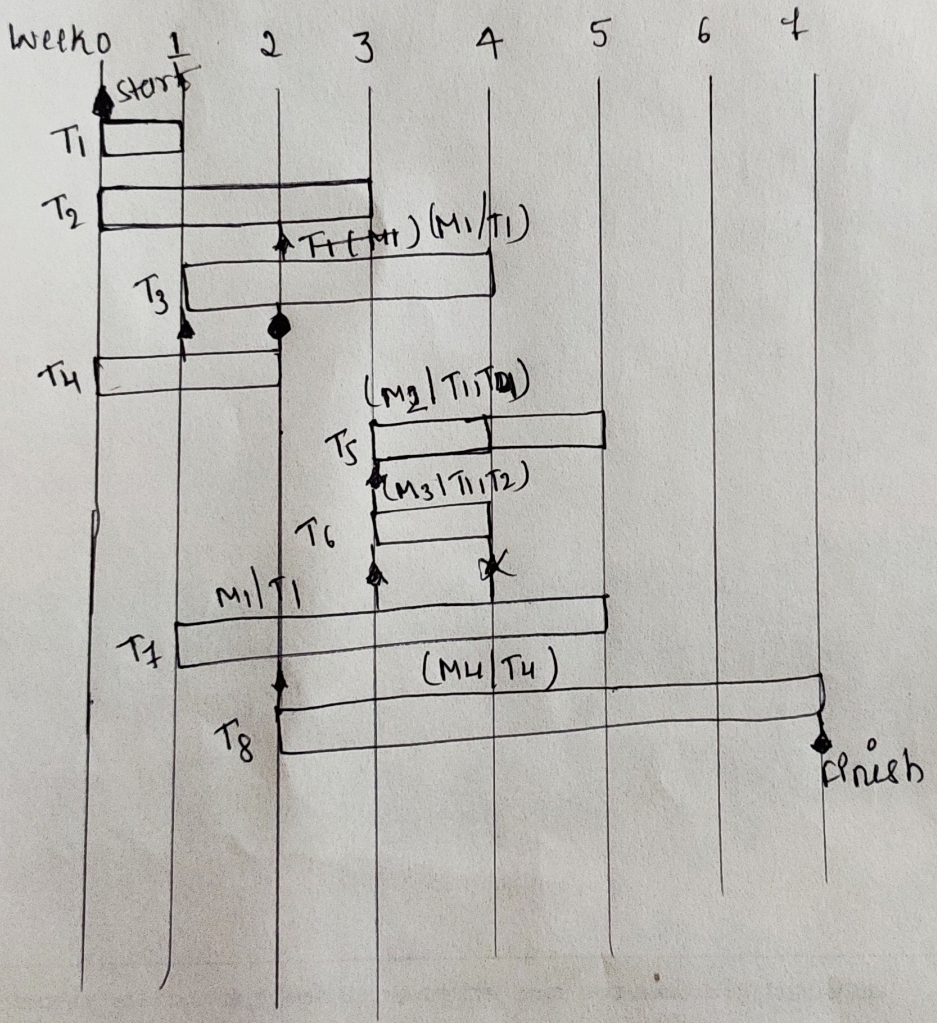
* A structural perspective where you model the organization of a system or the structure of date that is processed by the system.

* A behavioral perspective where you model the dynamic behavior of system & how it responds to events.

③ 5 days = 1 week.

| Task | Duration (days) | Dependencies |
|---|---|---|
| $T_1$ | 05 | — |
| $T_2$ | 15 | — |
| $T_3$ | 15 | $T_1$ ($M_1$) |
| $T_4$ | 10 | — |
| $T_5$ | 10 | $T_2$, $T_4$ ($M_2$) |
| $T_6$ | 05 | $T_1$, $T_2$ ($M_3$) |
| $T_7$ | 20 | $T_1$ ($M_1$) |
| $T_8$ | 25 | $T_4$ ($M_4$) |

Activity bar chart



# Agile planning

- Agile methods of software development are **iterative** approaches where the **software is developed and delivered to customers in increments.**

- Unlike plan-driven approaches, the functionality of these increments is **not planned in advance but is decided during the development.**
  - The decision on **what to include in an increment** depends ***on progress*** and on the ***customer's priorities.***

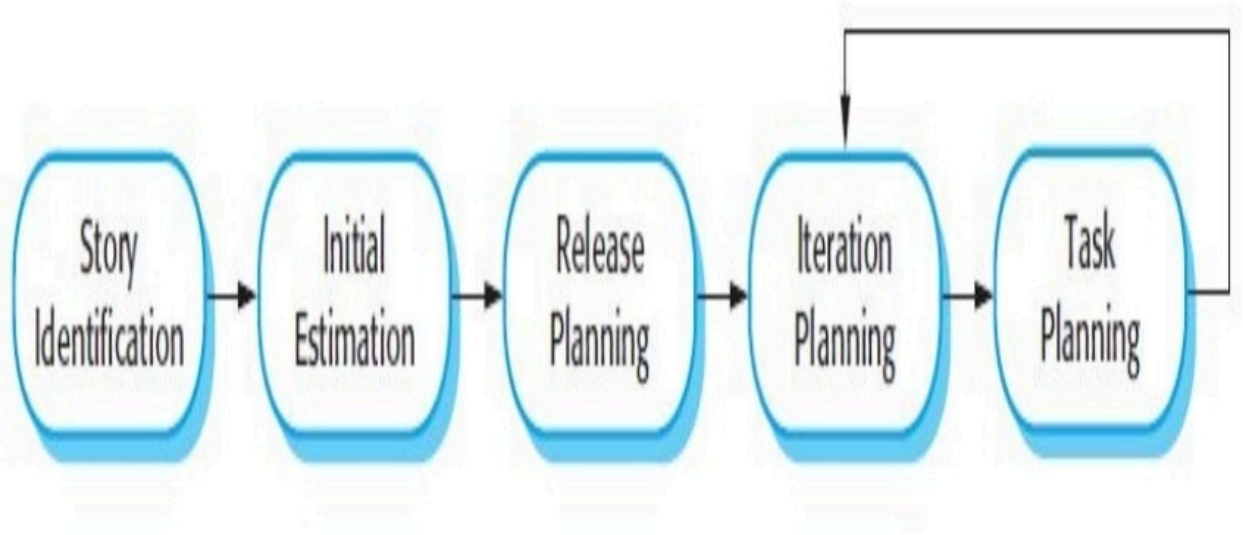
- The customer's priorities and requirements change so it makes sense to have a **flexible plan** that **can accommodate these changes.**

# Agile planning stages

- **Release planning**, which looks ahead for ***several months*** and **decides on the features** that should be included in a **release of a system.**

- **Iteration planning**, which has a ***shorter term outlook***, and focuses on planning the ***next increment of a system***. This is typically ***2-4 weeks of work for the team.***

# Planning in XP



# Plan-driven development

- Plan-driven or plan-based development is an approach to software engineering **where the development process is planned in detail.**
  - Plan-driven development is based on **engineering project management techniques** and is the **'traditional' way of managing large software development projects**.

- A project plan is created that **records** the ***work to be done***, ***who will do it***, the ***development schedule*** and the ***work products.***

- **Managers** use the plan to ***support project decision making*** and as a ***way of measuring progress.***

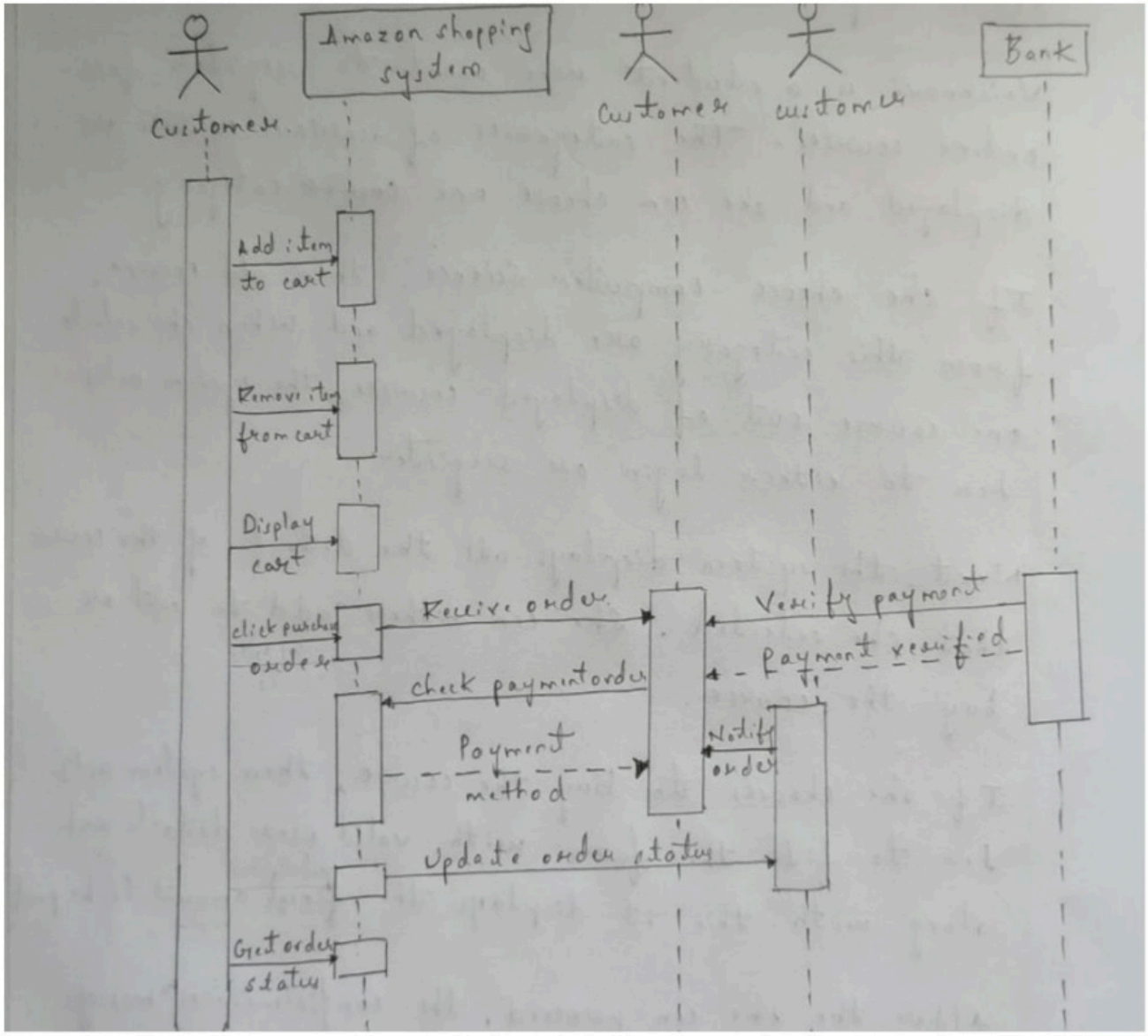
## Plan-driven development – pros and cons

- The arguments in favor of a plan-driven approach are that early planning allows ***organizational issues (availability of staff, other projects, etc.) to be closely taken into account,*** and that ***potential problems*** and ***dependencies are discovered*** **before the project starts**, rather than once the project is underway.

- The principal **argument** against plan-driven development is that ***many early decisions have to be revised*** **because** of ***changes to the environment in which the software is to be developed and used.***

12. Draw Sequence diagram for make payment use case in Amazon E-commerce web application.

Ans:



11. Analyse the agile method to develop story card, 3task cards and 2 test cards for website development of college. Stakeholders for a given system are
    a. College
    b. Student
    c. Faculty

Ans: Story Card

| It is very important to have website for a college.<br><br>Faculty members get the updates about the schedule of lectures, certain events etc.<br><br>Students get the update about Calendar of events, examinations, results, revaluations, or some circulars etc.<br><br>It contains brief information about all the faculties of all departments.<br><br>It also contains information regarding college, departments that can help freshers to have information about the college. |
|---|



Task cards

1.

| 'Useful' Home page |
|---|
| By word 'useful', it means the students/faculties should get the required information really quick on jus few clicks.<br><br>The website should be made simple by offering best design.<br><br>The website should have news about the calendar of events, latest update of college.<br><br>Website should have responsive design which fits all desktop.<br><br>Website should have well-organised navigation. |

2.

| Admission enquiry page |
|---|
| Admission enquiry page should have all the information such as Department names, fees for certain categories (CET, Comed-K) etc.<br><br>It should have a welcome page for students and it should have a brochure where students can download the details about the college. |

3.

| 'What's new' about the college |
| --- |
| The college website should contain information page where in new accomplishments of college can be displayed.<br><br>The accomplishments of college students in different aspects and field should be visible for the users.<br><br>It should display the upcoming events taking place in the college. |

## Test Cards

1.

| |
| --- |
| Input: The user enters the website link to open the website<br><br>Test case: Tests whether the link is correct or invalid<br><br>Output: Opens the college website if successful or display error. |

2.

| Admission enquiry page |
| --- |
| Input: User enters the details in the given form.<br><br>Test case: Tests whether the form is completely filled in proper format or not.<br><br>Output: The brochure containing college details is mailed to the user if successful or display error. |

ಒಂದೇ ವಾಲ್ಮೀಕಿ ಕೋಕಿಲಂ

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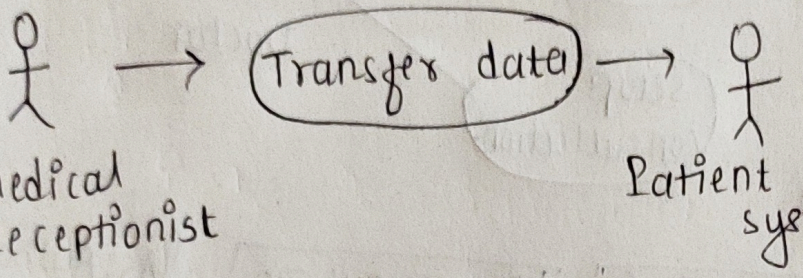
Use case in MHC-PMS (data transfer)




Tabular description

Actors : Medical receptionist, Patient records system (PRS)

Description: A receptionist may transfer data from the MHC-PMS to a general patient record database that is maintained by a health authority.

Data : Patient's personal info, treatment summary.

Stimulus : user command issued by medical receptionist

Response : confirmation that PRS has been updated.

comments: The receptionist must have appopriate security permissions to access the patient info & PRS.

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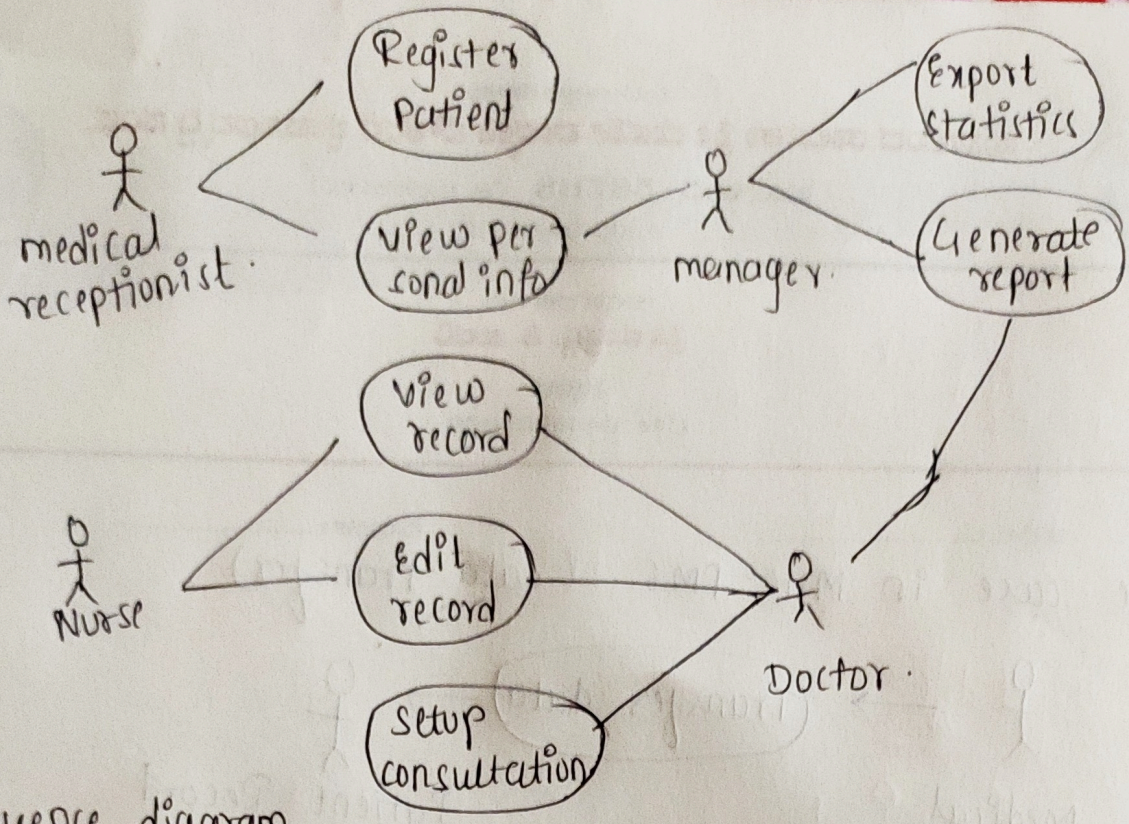
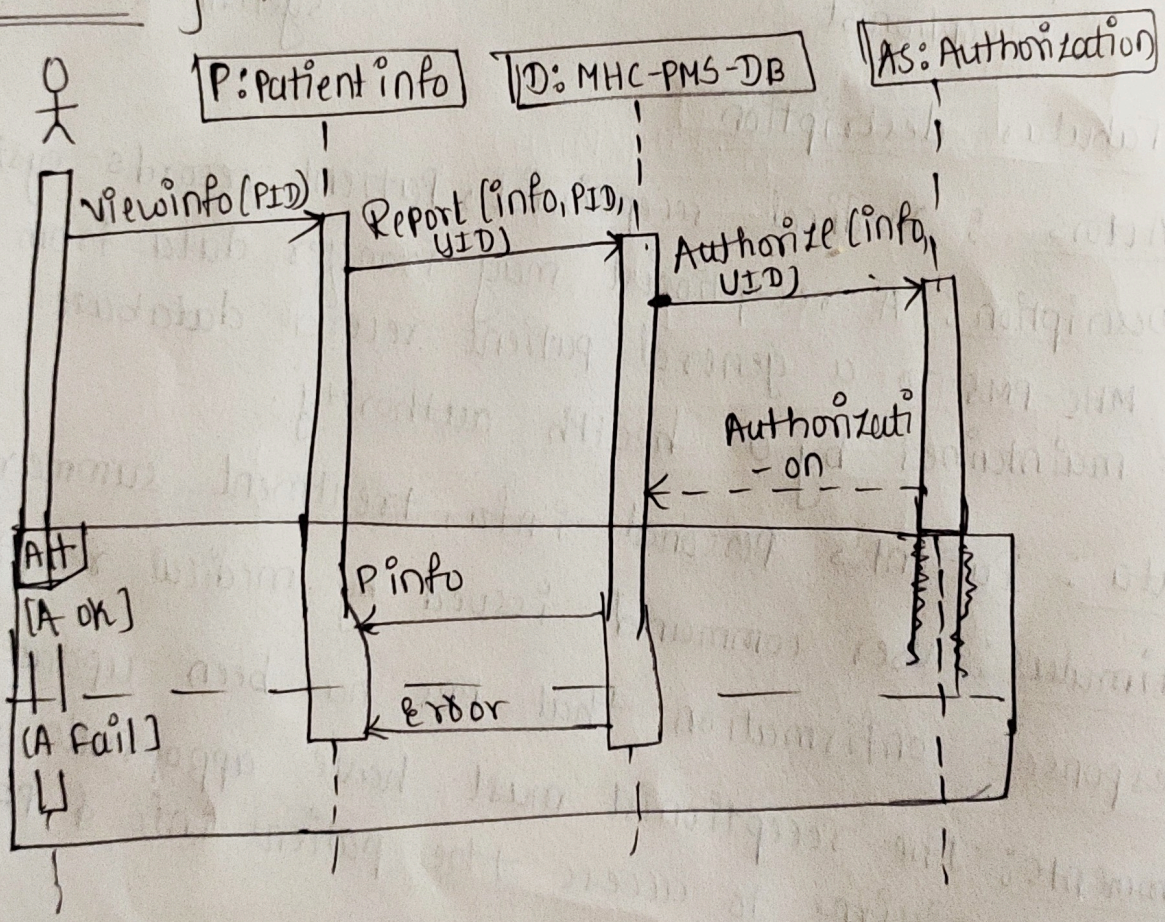



Sequence diagram



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ಉಲ್ಲೇಖ :..... ದಿನಾಂಕ :.....

# Weather station

system: weather station

Use case: Report weather control system

Actors: weather info system, ~~weather station~~ control syst.

Description: The ~~weather station~~ sends a summary of the weather data that has been collected from ~~in the collection~~ instruction weather info system. The data sent are max, min, avg air pressures, wind speeds, rainfall.

stimulus: The weather info system establish a satellite communication link with the weather station.

Response: The summarized data is sent to weather information system.

comments: weather stations are usually asked to report once per hour.

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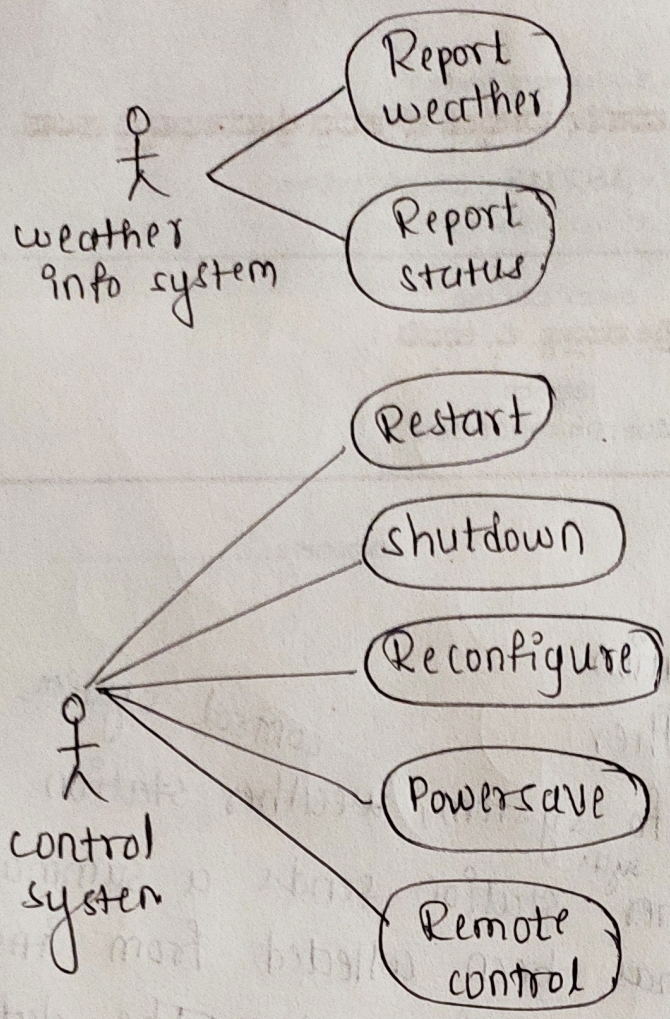
Report weather
Report status
weather info system
Restart
shutdown
Reconfigure
Powersave
Remote control
control system