1. a) Software process is the roadmap of activities involved that are required in developing the software.

b) Specification. Development teams identify the functional and non-functional requirements of the software during this stage.

Development. Development teams proceeds to the actual development of the software based on requirements identified from the specification stage.

Validation. Development teams verifies and ensures that the developed software conforms to standards and meet client expectations during this stage.

Evolution. Development teams obtains client feedbacks and plans the next software iteration during this stage.

1. Ai. User manuals

ii. User stories

iii. Release notes

iv. Software architecture documents

AiEX. Gantt chart

iiEX. Flowchart

iiiEX. Use case diagrams

ivEX. Backlog

B) – To act as primary source of reference. Development teams and customers will be able to easily communicate using system documentations as a medium.

-- Ensure software meets initial expectations. Developers will be able to refer to system documentations to prevent them from straying away from original development goals.

-- Better organization of system information. Software components can be categorized according to their area of expertise and allow users to obtain necessary information at a glimpse.

1. Prototyping process.

* Reduce the time taken to provide a sample system for the clinic. Using the waterfall process, development teams will need to take a longer time to conduct methodological research before they can develop the complete system.
* Overlooked requirements can be obtained after testing the prototype in action. The clinic will be able to identify missing requirements that were not included initially with prototypes that do not require a lot of effort to build.
* Allow developers to integrate additional requirements with ease and prioritize important ones. Development teams will be able to put more effort in important features for the patient management system.
* It enables the clinic to use the system while developers are working on a new prototype. It enables the clinic to continue normal operations without needing to rely on new system versions.

1. Sprint duration: 1 week

ii. Number of working days per week: 5

iii. Number of scum team members: 6

iv. Work hours per day: 8

Total effort per team member = 5 x 8 = 40 hrs

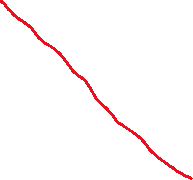
Total effort needed to burn = 40 x 6 = 240hrs

Effort per day = 240/5 or 6membersx8hrs= 48hrs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Expected effort | Day of Sprint | Actual effort | Expected burn | Actual burn |
|  | 0 |  | 240 | 240 |
| 48 | 1 | 60 | 192 | 180 |
| 48 | 2 | 48 | 144 | 132 |
| 48 | 3 | 60 | 96 | 72 |
| 48 | 4 | 40 | 48 | 32 |
| 48 | 5 | 32 | 0 | 0 |

Chart, scatter chart

Description automatically generated



Expected



Actual

