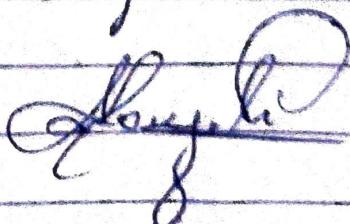


- 1) Name : Venkatesh G D
- 2) USN : 2GI19CS175
- 3) BE : BE
- 4) Semester : 4
- 5) Course Name : Software Engineering
- 6) Course Code : 18CS45
- 7) College : KLS GIT
- 8) Date & Time : 05-06-2021
- 9) Mobile Number : 9972287030
- 10) I hereby declare that all above info is true  
to best of my knowledge
- 11) Signature : 

- 3) Code of Ethics & Professional practices:
- 1) PUBLIC: Software engineering shall act consistently with public interest.
  - 2) CLIENT & EMPLOYER: Software engineering shall act in a manner that is in the best interest of their client & employer consistent with public interest.
  - 3) PRODUCT: Software engineers shall ensure that their products & related modifications meet the highest professional standards possible.
  - 4) JUDGEMENT: Software engineers shall maintain integrity & independence in their professional judgment.
  - 5) MANAGEMENT: Software engineering managers & leads leaders shall subscribe to & promote an ethical approach to the management of software development & maintenance.

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## Waterfall model

- Need of detailed documentation \* Incremental model  
on waterfall model is necessary
- In waterfall early stage planning \* Need of documentation is necessary but not too much  
is necessary.
- There is high amount risk \* There is low amount risk
- There is long waiting time for running software \* There is short waiting time for running software
- Flexibility to change is difficult \* Flexibility to change is easy
- Ex: Banking, healthcare \* Ex: e-commerce website

## 6) Types of non functional requirements:

→

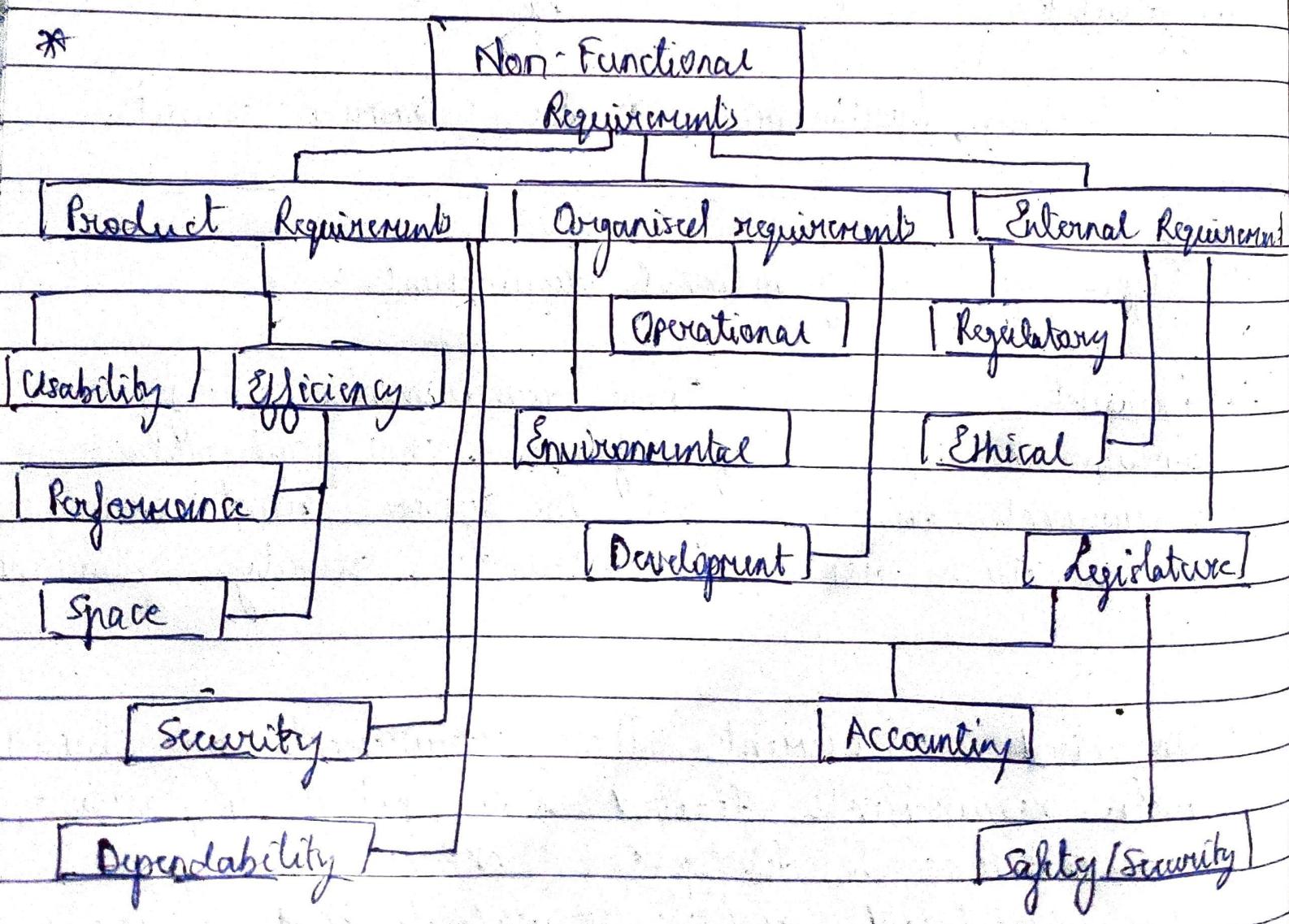
- i) Product requirements: These requirements specify or contain the behaviour of software. Ex: performance requirements on how fast the system must execute & how much memory it requires, security requirements etc.
- ii) Organised requirements: These requirements are broad system requirements derived from policies & procedures in customer's & developer's organisation.  
Ex: operational process requirements that define how the system will be used, development process

6.) ii.) requirements that specify the programming language, the development environment & environmental requirements.

iii.)

External requirements: This broad heading covers all requirements that are derived from factors internal to the system & its development process.

These may include regulatory requirements that set out what must be done for the system to be approved for use by a regulation, such as central bank; legislative requirements that must be followed to ensure that system operates within law & ethical requirements etc.



<u>Stakeholder</u>	<u>Category</u>	<u>Responsibility</u>
5.7 * The University	→ Principal	→ Ensure library provides sufficient facilities
* system manager	→ Actor	→ Ensure system works properly; communicate with system supplier.
* Acquisition Manager	→ Actor	→ Order new books for library
* library administrator	→ Actor	→ Manage finance & resources
* Principal technician	→ Actor	→ Manage media services
* Senior technician	→ Actor	→ Manage video/CD media unit.

- 1.) i.) Software engineering is an engineering discipline that concerns with all aspects of software products
- ii.) Essential attributes of a good software
- \* Maintainability
  - \* Dependability & security
  - \* Efficiency
  - \* Acceptability
- iii.) \* Computer Science : It is a discipline that involves the design & understanding of computers & its powers.
- \* Software Engineering : It is defined as a process of analyzing user requirements & then designing, building & testing software applications.

1) iv.) Requirement Engineering, is the process of defining, documentation & maintaining requirements in the engineering design process. It is a common role in systems engineering & software engineering. In waterfall model, requirement engineering is presented as first phase of development process.

v.) \* User Requirements : Statements in natural language plus diagrams of services the system provides & its operational constraints, written for customers

\* System Requirements : A structured document setting out detailed descriptions of system's functions, services & operational constraints. Defines what should be implemented so may be a part of contract between client & contractor.