SNS COLLEGE OF TECHNOLOGY

Coimbatore-35

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SOFTWARE ENGINEERING

(Agile UX/UI)

UNIT 2 – AGILE DEVELOPMENT

TOPIC – Introduction

Personal and team process models

AGILE METHODOLOGY

- Process for developing software
- Agile means
  - Ability to move quickly
  - Responding swiftly to change

What is Agile ?

NON AGILE METHOD

- A project can take several months or years to complete and the customer may not get to see the end product until the completion of the project
- Allocate extensive periods of time for requirements gathering ,design ,development, testing and user acceptance testing before finally deploying the project

AGILE METHOD

- It have **Sprints or iteration** which are shorter in duration (which can vary from 2 weeks to 2 months) during which pre determined features are developed and delivered

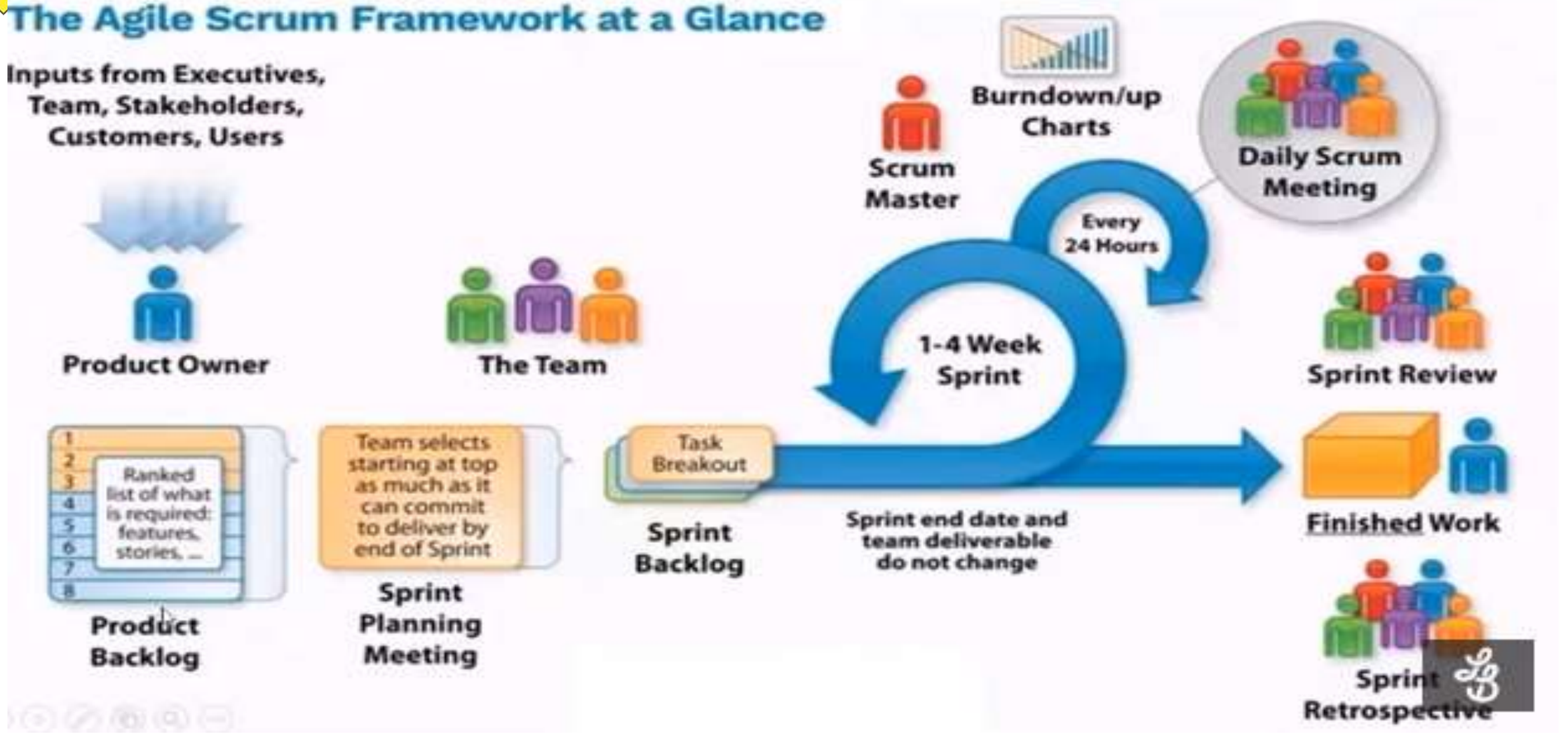
SCRUM

- Framework for managing work with an emphasis on software development
- Software development ⟶ **ITERATIONS** (within time boxed)

⬇

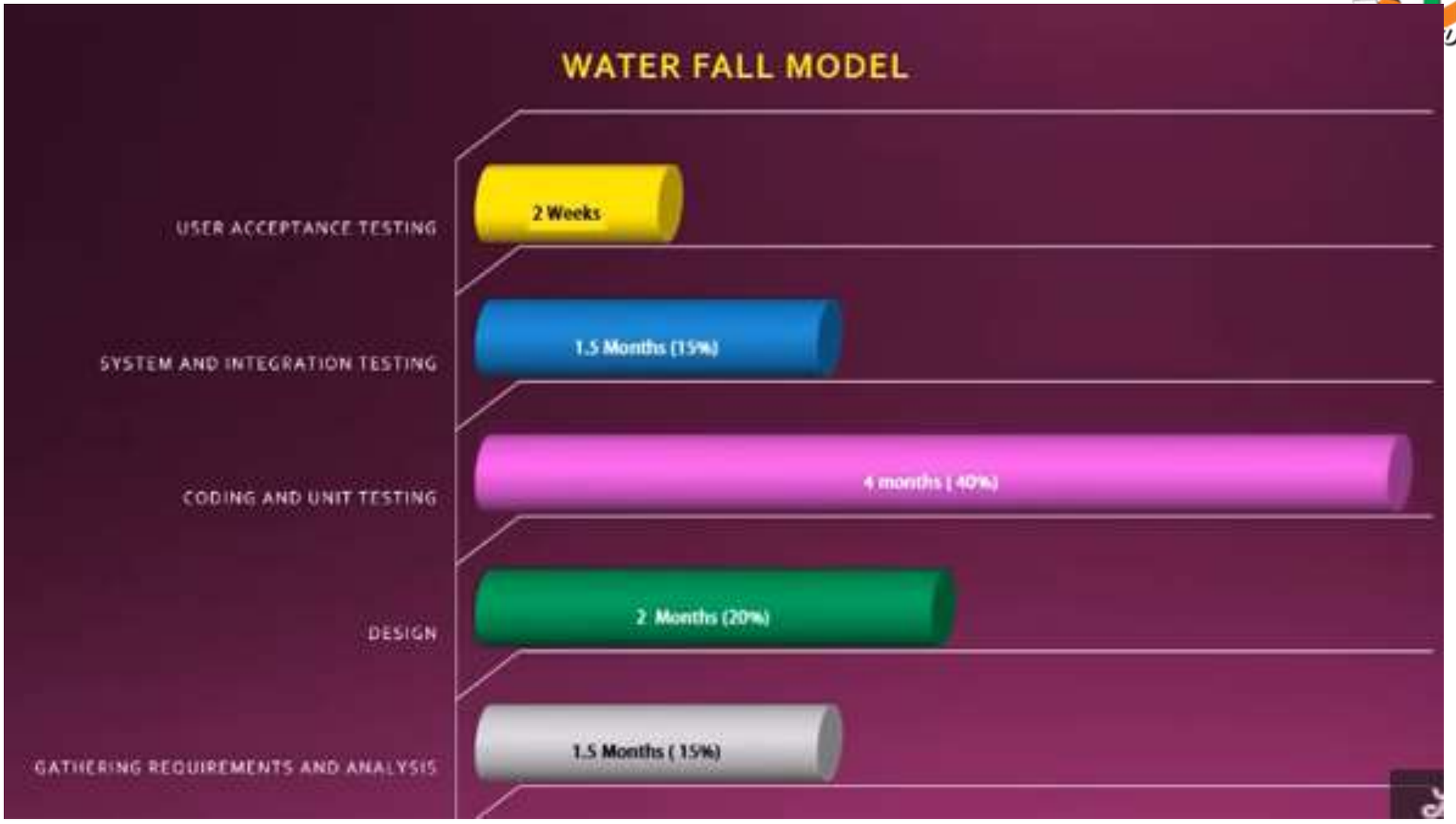
Sprints (typically two weeks)

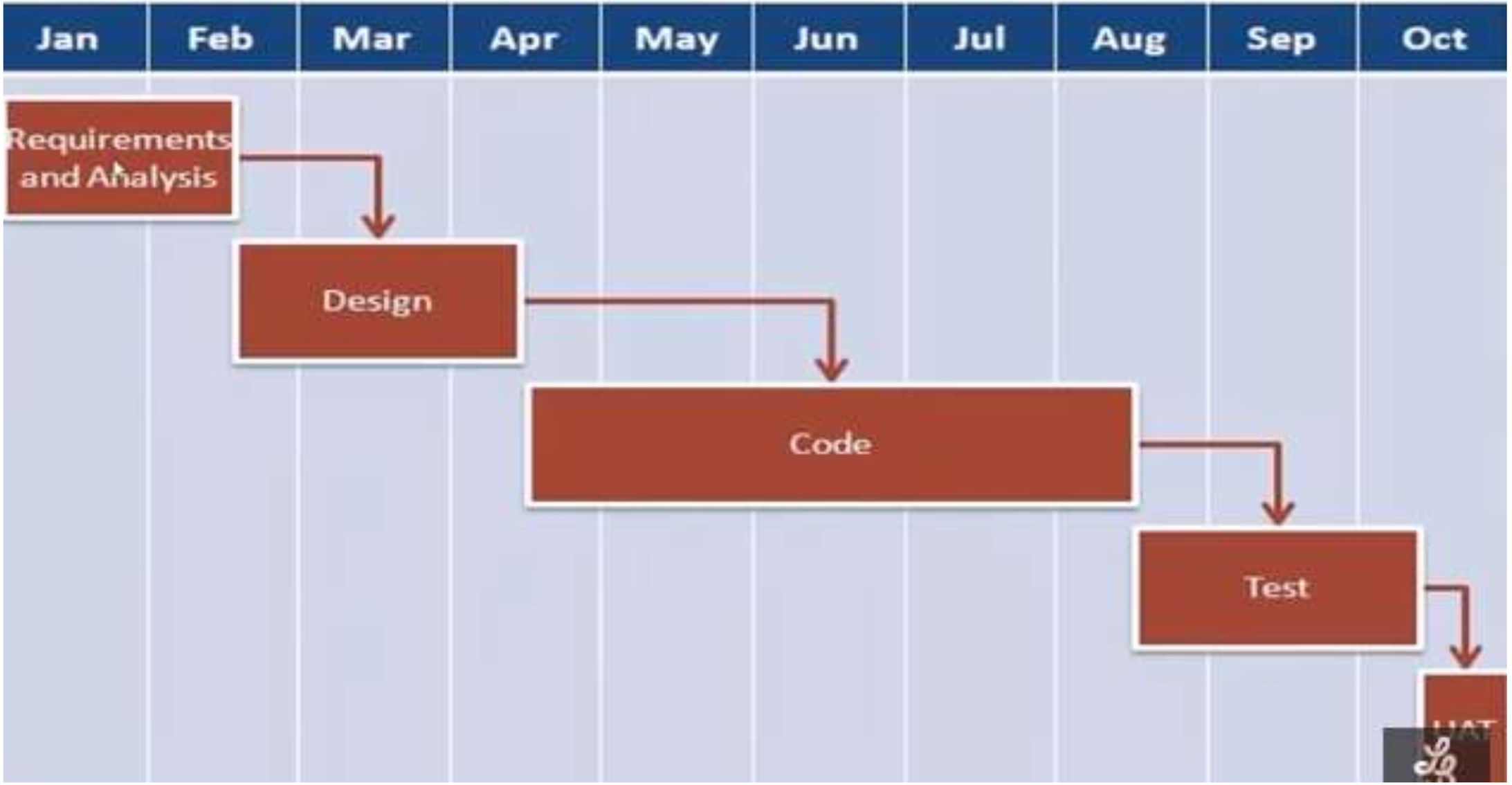
SCRUM key Roles →
- Scrum Master
- Scrum Product Owner
- Development Team


The Agile Scrum Framework at a Glance
Inputs from Executives, Team, Stakeholders, Customers, Users
Product Owner
The Team
Scrum Master
Burndown/up Charts
Daily Scrum Meeting
Every 24 Hours
1-4 Week Sprint
Sprint Review
Ranked list of what is required: features, stories, ...
Product Backlog
Team selects starting at top as much as it can commit to deliver by end of Sprint
Sprint Planning Meeting
Task Breakout
Sprint Backlog
Sprint end date and team deliverable do not change
Finished Work
Sprint Retrospective

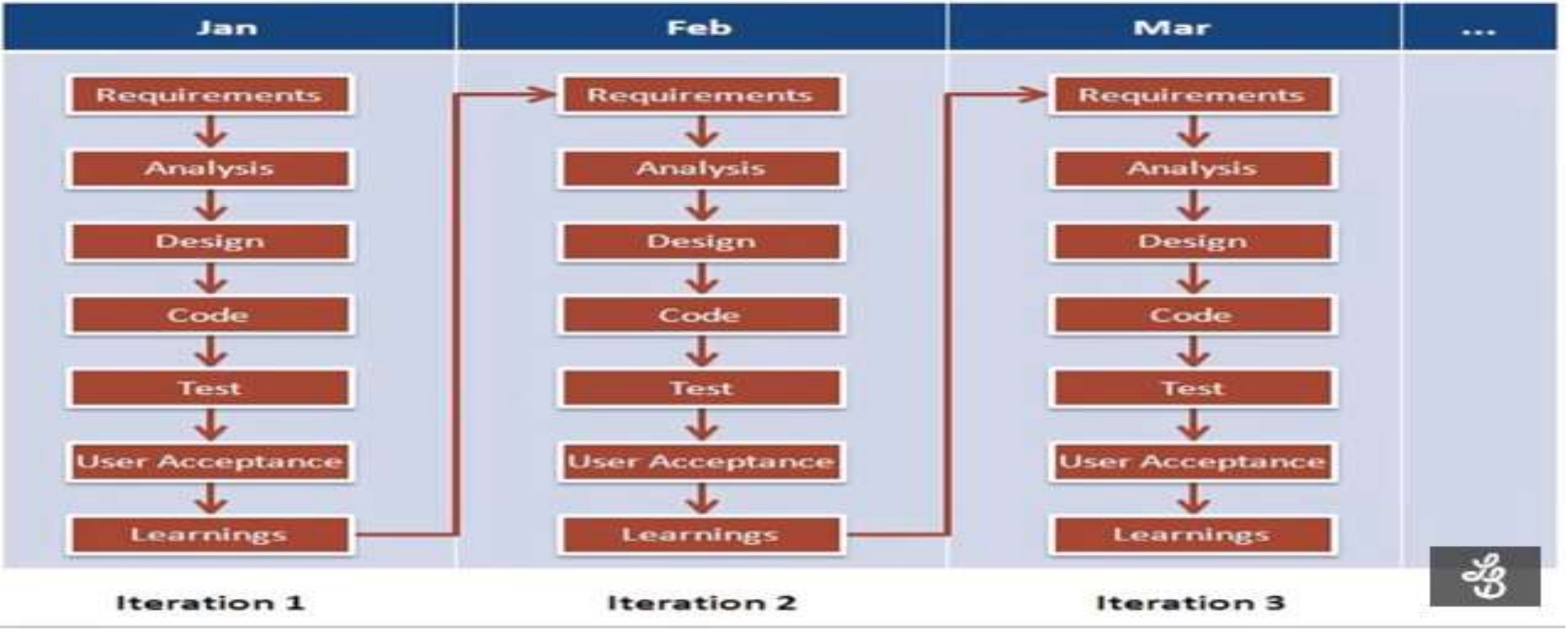
Example of AGILE software development

- **Product** –MS Word
- **Features** – All the features provided by MS Word and any other features requested by the marketing team
- **Duration -**10 Months


WATER FALL MODEL
USER ACCEPTANCE TESTING
2 Weeks
SYSTEM AND INTEGRATION TESTING
1.5 Months (15%)
CODING AND UNIT TESTING
4 months (40%)
DESIGN
2 Months (20%)
GATHERING REQUIREMENTS AND ANALYSIS
1.5 Months (15%)


Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Requirements and Analysis
Design
Code
Test

AGILE METHODOLOGY



ADVANTAGES

- The delivery of software is unremitting
- Customer satisfaction is more here
- Changes of the product are done easily and on time
- The daily interactions are required between the business people and the developers. Attention is paid to the good design of the product

DISADVANTAGES

- Documentation is less
- Unknown risks may occur due to the lack of risk analysis which may leads to unexpected outcome rarely