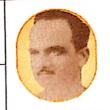


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DoI: 02/01/2023

Revision: 00



EVENT REPORT

Name of Event: MAATR Software Development Process Training

Record No.: ACA/D/021

Date of Event: 1st February 2024

Time of event: 03.00 pm to 04.30 pm

Name of Event Coordinator: Prof.ChetnaUpasani

Target Audience with count:

Students:

Computer Engineering → 05
Information Technology → 05
Electronics & Telecommunication → 05
AI & DS → 05

Faculty: 06

Brief Description of Event:

Capgemini has organized online training on Project MAATR with the collaboration of IICARE Foundation Dr.Santosh Bhosale.Software Development Life cycle, Agile Software, Software Development, Scrum, Kanban, Extreme Programming, Lean Software Development, FARM High level Architecture, Testing & Maintenance participated by Computer Engineering, Information Technology, Electronics & Telecommunication, Artificial Intelligence & Data Science staff and students

What is SDLC?

The software development lifecycle (SDLC) is the cost-effective and time-efficient process that development teams use to design and build high-quality software. The goal of SDLC is to minimize project risks through forward planning so that software meets customer expectations during production and beyond. This methodology outlines a series of steps that divide the software development process into tasks you can assign, complete, and measure.









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Test

The development team combines automation and manual testing to check the software for bugs. Quality analysis includes testing the software for errors and checking if it meets customer requirements. Because many teams immediately test the code they write, the testing phase often runs parallel to the development phase.

Maintain

In the maintenance phase, among other tasks, the team fixes bugs, resolves customer issues, and manages software changes. In addition, the team monitors overall system performance, security, and user experience to identify new ways to improve the existing software.

What are SDLC models-waterfall, V-shapes

In MAATR project use agile methodology, iterative approach, continuous feedback and changes.

Agile Methods:

The Agile methodology is a project management approach that involves breaking the project into phases and emphasizes continuous collaboration and improvement. Teams follow a cycle of planning, executing, and evaluating.

Scrum:

Five values:

Courage, focus, commitment, respect, openness

Five Events:

Sprint, sprint planning, daily scrum, sprint review, sprint retrospective.







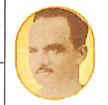


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Scrum Master: A Scrum master is a professional who leads a team through a project using agile project management techniques. A Scrum Master facilitates all the communication and collaboration between leadership and team players to ensure a successful outcome.

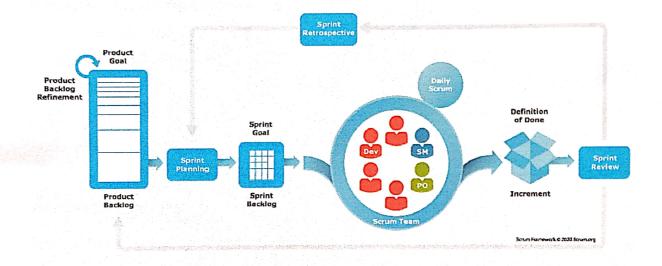


Fig.Scrum

Kanban

Kanban board is a work board divided into several column.

Kanban is an Agile management method built on a philosophy of continuous improvement, where work items are "pulled" from a product backlog into a steady flow of work. The framework is applied using Kanban boards—a form of visual project management. In a Kanban board, tasks-represented as cards-move through stages of work-represented as columns. That way, your team can see where work is in real-time. College

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Extreme Programing:

Extreme Programming (XP) is an agile software development framework that aims to produce higher quality software and higher quality of life for the development team. XP is the most specific of the agile frameworks regarding appropriate engineering practices for software development

ReactJS and Node JS Used in MAATR Project

Principle of Lean Software Development(LSD)

- 1. Eliminate waste
- Create knowledge
- 3. Build quality
- 4. Fast delivery
- 5. Improve your team
- 6. Delay in making Decision

Amazon Web Services:

AWS offers a vast array of services, including computing power, storage options, databases, machine learning, analytics, content delivery, and more. Some key components of AWS include:

1. Storage Services:

- Amazon S3 (Simple Storage Service): Offers scalable object storage in the cloud.
- Amazon EBS (Elastic Block Store): Provides persistent block-level storage volumes for use with EC2 instances.

2. Database Services:

- Amazon RDS (Relational Database Service): Manages relational databases like MySQL, PostgreSQL, and others.
- Amazon DynamoDB: A managed NoSQL database service.

3. Networking:

- Amazon VPC (Virtual Private Cloud): Enables you to launch AWS resources into a virtual network.
- Amazon Route 53: A scalable domain name system (DNS) web service.
- MAATR High level architecture (AWS Cloud)
- Network Load balancing







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EVENT REPORT

- Relational Database Service (RDS)
- Identity and Access Management (IAM)
- Cloud watch
- S3 bucket
- Certificate manager
- 8. Analysis of ASHA incentive and performance reports

ASHA video run at s3 bucket.

4. Testing and Maintains

Quality Testing

- Identifying and rectifying errors, bugs, and redundancies
- Confirming logical flow
- Ensuring a seamless User Interface (UI) and User Experience (UX)
- Addressing unexpected software flaws and
- Validating that developers adhere to customer requirements.

UAT Testing:

The primary goal of UAT is to validate that the software meets the business requirements and that it is fit for use by end-users.

End users or representatives from the user community are actively involved in UAT. These individuals may include business analysts, product owners, and actual end-users who will be using the software.

Test scenarios and test cases are created based on real-world usage and business processes. These are often derived from user stories, use cases, or business requirements.







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Application Data Updation Analysis:

Mobile Application MAATR (Related to maternal and child health information)

ASHA Diary (Related to generate Log about ASHA data and generate work status about ASHA Workers.)

NHM cockpit is a Web application to be developed.

In this following information will stored

- 1. Location wise master
- 2. User related Master
- 3. Work category master
- 4. Training master

NHM cockpit user can check the distribution on ASHA in different incentive.

Also check ASHA Performance.

Benefits for Student from MAATRTraining

- > Understand the Software Development Process
- > Understand the Tester Roles and Responsibilities.
- > How to build high Quality Product.
- > Understand the different Process model.





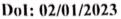




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Benefits for Faculty from MAATR Training

- > Understand the agile Methology.
- > Understand the AWS Services.
- > Understand the Types of Testing Methods.
- ➤ Learn System architecture of MAATR project.
- > Enhance the Knowledge about actual development of software.
- Understand the flow of ASHA Diary and MAATR Project.
- Acquire the knowledge about NHM Web application.

Date: 3 / 2 / 2024

Event Coordinator

Head of Department

Principal

