MADANAPLLE INSTITUTE OF TECHNOLOGY & SCIENCE

(UGC-AUTONOMOUS)

Report on Guest Lecture CloudComputing

Organized by

Department of computer Applications

19.07.2017

Submitted by: Dr SG Shrinivas

Attended: III MCA Students(Total 37 Students)

Resource Person: Kiran Kumar, Capgemini(2013 Batch)

Guest Lecture started with introductory talk by HoD Dr V.L Pavani and Alumni Head Dr P. Ramesh Reddy.

About CloudComputing:

Cloud computing is the delivery of on-demand computing services from applications to storage and processing power typically over the internet and on a pay-as-you-go basis.

Rather than owning their own computing infrastructure or data centers, companies can rent access to anything from applications to storage from a cloud service provider.

One benefit of using cloud computing services is that firms can avoid the upfront cost and complexity of owning and maintaining their own IT infrastructure, and instead simply pay for what they use, when they use it.

In turn, providers of cloud computing services can benefit from significant economies of scale by delivering the same services to a wide range of customers.

Cloud computing underpins a vast number of services. That includes consumer services like Gmail or the cloud back-up of the photos on your smart phone, though to the services which allow large enterprises to host all their data and run all of their applications in the cloud. Netflix relies on cloud computing services to run its video streaming service and its other business systems too, and have a number of other organizations.

Cloud computing is becoming the default option for many apps: software vendors are increasingly offering their applications as services over the internet rather than standalone products as they try to switch to a subscription model. However, there is a potential downside to cloud computing, in that it can also introduce new costs and new risks for companies using it.

A fundamental concept behind cloud computing is that the location of the service, and many of the details such as the hardware or operating system on which it is running, are largely irrelevant to the user. It's with this in mind that the metaphor of the cloud was borrowed from old telecoms network schematics, in which the public telephone network (and later the internet) was often

represented as a cloud to denote that the just didn't matter -- it was just a cloud of stuff. This is an over-simplification of course; for many customers location of their services and data remains a key issue.

Cloud Computing as a Service Revenue ($bn)
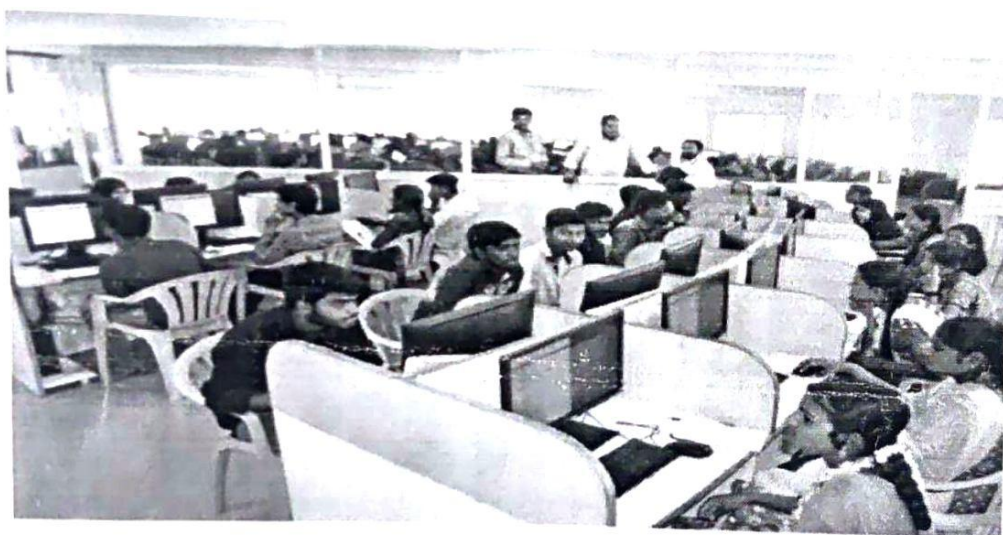
Finally, the session was concluded with a vote of thanks by Dr. VL Pavani and Dr P.Ramesh Reddy. All the students also expressed their happiness on learning SharePoint.

MADANAPLLE INSTITUTE OF TECHNOLOGY & SCIENCE

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Report on Guest Lecture Testing Methodologies

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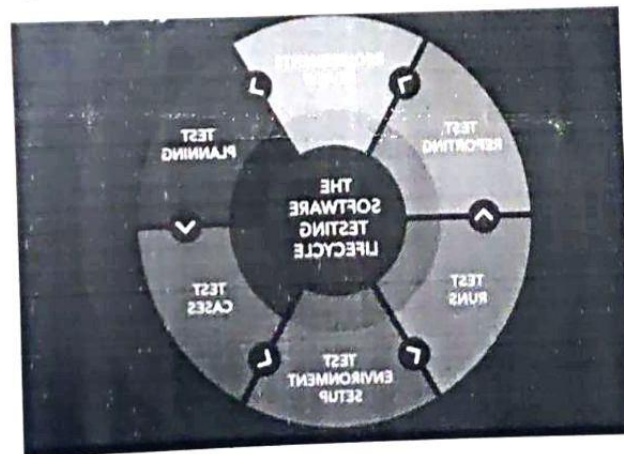### Department of computer Applications

23.08.2017

Submitted by: Dr SG Shrinivas

Attended: III MCA Students(Total 37 Students)

Resource Person: Anusha, TCS(2008 Batch)

The guest lecture was intiated by introductory talk by Dr. V.L Pavani and Alumni Head Dr. P. Ramesh Reddy.

About Testing Methodologies:

Software testing methodologies are the various strategies or approaches used to test an application to ensure it behaves and look as expected. These encompass everything from front to back-end testing, including unit and system testing. This article is designed to highlight the myriad of testing techniques used by quality assurance professionals.

The goal of utilizing numerous testing methodologies in your development process is to make sure your software can successfully operate in multiple environments and across different platforms. These can typically be broken down between functional and non-functional testing. Functional testing involves testing the application against the business requirementsUnit testing

- Integration testing
- System testing
- Acceptance testing

Non-functional testing methods incorporate all test types focused on the operational aspects of a piece of software. These include:

- Performance testing
- Security testing
- Usability testing
- Compatibility testing

Performance Testing:

Performance testing is a non-functional testing technique used to determine how an application will behave under various conditions. The goal is to test its responsiveness and stability in real user situations. Performance testing can be broken down into four types:

- **Load testing** is the process of putting increasing amounts of simulated demand on your software, application, or website to verify whether or not it can handle what it's designed to handle.
- **Stress testing** takes this a step further and is used to gauge how your software will respond at or beyond its peak load. The goal of stress testing is to overload the application on purpose until it breaks by applying both realistic and unrealistic load scenarios. With stress testing, you'll be able to find the failure point of your piece of software.
- **Endurance testing,** also known as soak testing, is used to analyze the behavior of an application under a specific amount of simulated load over longer amounts of time. The goal is to understand how your system will behave under sustained use, making it a longer process than load or stress testing (which is designed to end after a few hours). A critical piece of endurance testing is that it helps uncover memory leaks.
- **Spike testing** is a type of load test used to determine how your software will respond to substantially larger bursts of concurrent user or system activity over varying amounts of time. Ideally, this will help you understand what will happen when the load is suddenly and drastically increased.

There are multiple types of this testing method, each of which aimed at verifying six basic principles of security:

1. Integrity
2. Confidentiality
3. Authentication
4. Authorization
5. Availability
6. Non-repudiation

Finally, the session was concluded with a vote of thanks by Dr. V.L Pavani and Dr P.Ramesh Reddy. All the students also expressed their happiness on learning SharePoint.