**CDE STUDY CENTRE (D123)**

**(Set 32) – II Semester**

## Attention: Students of II semester MBA /MCA /M.Sc

## Date: 07/10/2023

The students of PG Degree Programme have to submit their **Assignment I & II** on or before **29/10/2023**. Further, the students are advised to adhere to the instructions communicated through e-mail/ notice board from time to time.

**Note:**

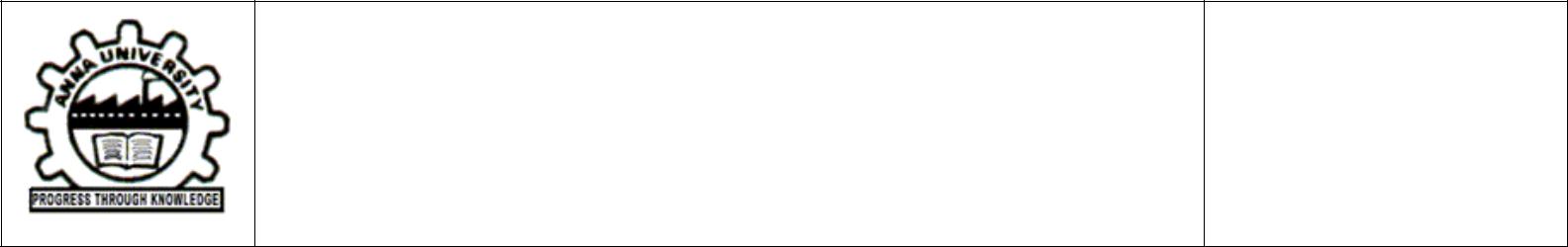
Assignments shall be submitted to the CDE STAFF (Set - 32), CDE, Anna University, Chennai - 25 during Break Hours.

**DIRECTION TO THE STUDENTS:**

1. Last date for submission of **Assignment-I & II**, is **29 Oct 2023**
2. Submit subject wise assignments (No need stick file)
3. Use the template for each **First page (Top Sheet) of the assignment**
4. All the assignments should be of student’s own hand writing
5. Each assignment should be of minimum of five page of A4 size paper
6. Each student should submit the **assignments of all their subjects at a stretch at the same time.**
7. No request for delayed submission shall be entertained
8. Attach one copy of the Acknowledgement print out along with the Assignments I & II.

**Co- ordinator**

**Set-32**

**

** CDE STUDY CENTRE**

**ANNA UNIVERSITY, CHENNAI 600 025**

044- 22357222

**ACKNOWLEDGEMENT**

**SET-32** **SEMESTER : II**

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| **Name** |  |
| **Roll No** |  |
| **Course** | **MCA** |

**Semester II**

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| **Sl. No.** | **Sub. Code** | **Subject Name** | **Assignments**  **Submitted ( )** | **Assignments not Submitted (X)** |
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| **Total No. of Assignments submitted** | | |  |  |

**Signature of Candidate Signature of the Staff**

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**SET 32 - MCA**

**Name :**

**Roll No :**

**Course :**

**SUBJECT CODE**

DMC \_\_\_\_\_



**SUBJECT NAME:**

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| --- | --- |
| Marks |  |
| Name and Signature (faculty) |  |

**CDE STUDY CENTRE**

**ANNA UNIVERSITY – CHENNAI 25**

**SET 32 (II MCA)**

**ANSWER ALL THE QUESTIONS**

**SEMESTER : II MCA**

**SUBJECT : DMC 6201 Internet Programming**

**Assignment - I**

1. A. Formulate a program that work with JSON.

     B. Summarize ASAX client server architecture in detail.

2. Demonstrate server architecture and explain its working principles

**Assignment - II**

1. Compare and contrast REST FULL web services and spring security with architecture

2. Analyze about higher order components with sample program.

**SEMESTER : II MCA**

**SUBJECT : DMC 6202 Cloud Computing Technologies**

**Assignment - I**

1. A Stub is a piece of code that transforms parameters passed between the client and server during a remote procedure call in distributed computing (RPC). An EPC’s main purpose is to enable a local computer (client) to call procedures on another computer remotely (server).
2. While message passing can be accurate, a more uniform, reusable and user friendly method of doing things would be preferable. RPCs (Remote Procedure Calls) provide this abstraction. Instead of looking at contact between two systems as a series of individual data exchanges, we take a step back and look at the systems’ overall behaviors. The system’s services are often decomposed into procedures, similar to those used in a standard programming. These procedures take a set of parameters, perform a useful task, and then return a result. We may extend this model to distributed systems using the RPC abstraction. Other systems can use remote procedure calls that are provided by one device.

**Assignment II**

1. Google Company offers both Software as a Service (SaaS) and Platform as a Service (PaaS) Solutions in Cloud Computing. Assume your company must deploy Java and PHP Solutions. Discuss how your company might use Google App Engine and the company potential cost. Discuss the Pros, Cons and compare with other popular cloud service Providers such as Amazon and Azure Cloud Services.
2. Social Networks as an SaaS Solution? Justify whether or not Social Networks a SaaS cloud computing solution. Include a description of the most appropriate deployment model for a social media site such as Face book. Your paper should be 4-5 pages.
3. Face book
4. Twitter
5. LinkedIn
6. Google Plus +

5.Tagged6.Flickr

Title: Social Networks as SaaS Solutions: A Comprehensive Analysis

Abstract:

This paper explores the applicability of Social Networks as Software as a Service (SaaS) solutions in cloud computing. We will analyze popular social media platforms such as Facebook, Twitter, LinkedIn, Google Plus, Tagged, and Flickr to determine whether they can be considered SaaS and discuss the most appropriate deployment model for a social media site, focusing on Facebook.

1. Introduction

Social networks have become an integral part of our lives, connecting individuals and facilitating communication and sharing of content. In recent years, many social networks have transitioned to cloud-based solutions, making them prime candidates for Software as a Service (SaaS) deployment. In this paper, we will explore whether popular social networks such as Facebook, Twitter, LinkedIn, Google Plus, Tagged, and Flickr qualify as SaaS solutions and discuss the most appropriate deployment model for a social media site, with a focus on Facebook.

2. Social Networks as SaaS

SaaS is a cloud computing model where software applications are hosted in the cloud and made available to users over the internet. Users can access these applications without the need for installation or maintenance on their local devices. Social networks exhibit several characteristics that align with the SaaS model:

2.1. Accessibility: Users can access social networks from any internet-enabled device, making them accessible without local installations or configurations.

2.2. Scalability: Social networks need to accommodate a vast number of users and data, and cloud-based infrastructure provides the scalability required for handling this growth.

2.3. Regular Updates: Social networks frequently introduce new features, security patches, and bug fixes, which is more efficiently managed in a centralized SaaS model.

2.4. Data Storage: SaaS solutions store vast amounts of user-generated data, such as photos, videos, and posts, in the cloud, making it accessible from any device with an internet connection.

2.5. User Management: SaaS platforms allow for user management, including authentication, authorization, and privacy settings.

3. Analysis of Social Networks

Let's evaluate the selected social networks to determine if they fit the SaaS model:

3.1. Facebook:

- Facebook operates entirely in the cloud, with users accessing the platform through web browsers and mobile apps.

- It offers regular updates and feature enhancements without users needing to install new software.

- All user data, including text, images, and videos, is stored in the cloud.

- Facebook's user management system includes features for setting privacy preferences.

- Facebook aligns well with the SaaS model.

3.2. Twitter:

- Twitter also operates as a web-based platform and mobile app.

- It provides regular updates for its users.

- User data, such as tweets and profiles, is stored in the cloud.

- Twitter's user management system offers authentication and user settings.

- Twitter is a suitable SaaS candidate.

3.3. LinkedIn:

- LinkedIn primarily functions as a web-based service, with mobile apps available.

- It releases updates and improvements without requiring local installations.

- User data like profiles and job postings are stored in the cloud.

- LinkedIn's user management system includes privacy settings.

- LinkedIn qualifies as a SaaS platform.

3.4. Google Plus:

- Google Plus was discontinued in 2019, which suggests it may not be a suitable SaaS example.

3.5. Tagged:

- Tagged is a social network that operates primarily online.

- It provides regular updates and features.

- User data, such as profiles and photos, is stored in the cloud.

- Tagged offers user management tools, including privacy settings.

- Tagged can be considered a SaaS solution.

3.6. Flickr:

- Flickr is a cloud-based platform for sharing photos and videos.

- It offers regular updates and feature enhancements.

- User-generated media content is stored in the cloud.

- Flickr's user management system includes privacy and sharing settings.

- Flickr aligns with the SaaS model.

4. Appropriate Deployment Model for Facebook

Among the mentioned social networks, Facebook is one of the most popular and complex platforms. Therefore, we will analyze the most appropriate deployment model for Facebook:

4.1. Public Cloud:

- Facebook predominantly relies on public cloud infrastructure provided by leading cloud service providers like Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP).

- Public cloud deployment offers scalability, cost-efficiency, and accessibility to a global user base.

4.2. Hybrid Cloud:

- Facebook may use a hybrid cloud model to manage peak workloads and sensitive data.

- Utilizing a hybrid model can provide flexibility and enhance data security.

4.3. Private Cloud:

- While Facebook predominantly operates in the public cloud, it may maintain some private cloud infrastructure for highly sensitive data and proprietary algorithms.

4.4. Multi-Cloud:

- Facebook may opt for a multi-cloud strategy to avoid vendor lock-in and improve redundancy.

5. Conclusion

In conclusion, social networks such as Facebook, Twitter, LinkedIn, Tagged, and Flickr can indeed be considered Software as a Service (SaaS) solutions. These platforms align with the key characteristics of SaaS, including accessibility, scalability, regular updates, data storage in the cloud, and user management.

The most appropriate deployment model for a social media site like Facebook is a combination of public cloud, hybrid cloud, private cloud, and potentially a multi-cloud strategy. This allows Facebook to effectively manage its extensive user base, maintain data security, and ensure scalability and flexibility.

As cloud computing and SaaS continue to evolve, social networks will likely play a crucial role in shaping the landscape of the digital world, connecting people globally while operating efficiently and securely in the cloud.

**SEMESTER : II MCA**

**SUBJECT : DMC 6203 - ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**

**Assignment - I**

1. Elaborate how an agent interacts with environment. Give its types of Agent.
2. What are the basic components of Propositional logic? Explain with an example.
3. Explain the steps in Bayesian learning with an example.
4. Discuss about forward chaining and backward chaining with an example.

**Assignment – II**

1. Discuss about the steps in classification using Decision tree with an example.
2. Explain the step in classification using support vector machine with an example.
3. List and briefly explain the logistic regression an gradient descent.
4. Explain in details about the various activation functions used in neural network with example.

**SEMESTER : II MCA**

**SUBJECT : DMC 6204 - Mobile Application Development**

**Assignment - I**

1. Explain in detail about Mobile Information Device Profile.

2. Explain the six reasons why mobile apps will become as important for companies as corporate websites.

**Assignment - II**

1. What are the techniques for composing applications?

2. Describe the importance of communication via the web?

**SEMESTER : II MCA**

**SUBJECT : DMC 6205 – Cyber Security**

**Assignment - I**

1. What do you mean by policy? Why it is developed and reviewed?
2. Explain Email Policy?

**Assignment - II**

1. Elaborate Cyber crime play a vital role against person property and govt. to protect all valuable information and rights?
2. Explain in what situation semiconductor law comes in consideration and how it differs from patent law?
3. Write a short note on
4. Patent Law
5. Copy write Law
6. IPR

**SEMESTER : II MCA**

**SUBJECT : DMC 6206 - Software Project Management**

**Assignment - I**

1. Illustrate Network Models.

**Assignment - II**

1. Write a brief note on Software Evaluation Technique.