Udemy

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Chapter 1

Business Architecture

1.1 Mission

Udemy's mission is to help anyone learn anything. We offer on-demand, affordable courses so that you can fulfill your limitless potential on your own terms, whether its for career advancement or personal interest.

1.2 Vision

Udemy believes that anyone can build the life they imagine through online learning whenever they want wherever they can.

1.3 Challenges

- **Trust** People usually do not trust each other specially when it comes to paying money. they can't trust the instructor or the course he is providing to deliver the expected knowledge they seek for without the right marketing.
- **Payment** People always look for the free courses. They will not pay for a course of web development for example that they can get an alternative for free.
- **Copyright** Some people pay for a course, download it and then upload it on any website for others completely for free.

1.4 Mergers And Acquisitions

- **Talentbuddy** Udemy's latest acquisition was Talentbuddy in Feb 2016. Talentbuddy is an online skills training platform for Java developers to improve their skills and connect them with career opportunities.

- **ebooks.com** I suggest Udemy to merge with any ebook system such as ebooks.com to attach books with suitable courses.

1.5 Future Growth

Udemy could implement an ebook service. The instructor can upload his book with his course at Udemy so the students do not have to use any outsider site to find additional resources.

Udemy also can filter all the courses and instructors to provide a better environment that contains only good quality content.

Chapter 2

Information Architecture

2.1 What is the nature of our information?

- courses (names of courses, description, videos, Rating)
- Students (Name ,Password, E-mail, Taken courses)
- instructor (Name, Course, CV)

2.2 What is the information we need to deal with

2.2.1 student Data

- Name
- E-mail
- Password
- Name of course
- etc...

2.2.2 Instructor Data

- Name
- E-mail
- Password
- Name of course
- CV

- etc...

2.3 What is the information we need to store

- user personal information
- Payment criteria
- Courses informations
- etc...

2.4 Information growth rate

Every month, Udemy gets hundreds of new courses,thousand of new users , Every course can be more than 10GB.

2.5 Best / Most suitable storage solution

cloud computing is the most suitable solution for storing such huge amount of data that Udemy deals with.

2.6 How information architecture will affect our future capabilities

Our information growth rate is going up pretty fast, so we need to increase our storage capacity.

Chapter 3

Information Technology Architecture

3.1 What is our IT infrastructure capabilities

This role will be defining the architecture, deployment, and operations of our compute and storage infrastructure. working with Site Reliability, Systems, IT and other engineering teams to ensure that our production, cloud, and corporate infrastructures are highly-available, scalable and secure.

3.2 Does it fit our needs? Does it fit our future needs?

With the IT infrastructure that Udemy uses, Technologies fit its needs. it is also very scalable to fit the future needs.

3.3 How can we face the information architecture challenges?

Udemy deals with a huge amount of data that is increasing every single hour. with flexible cloud storage they can increase its storage capacity whenever it needs to.
Udemy data is very important and it cannot get lost at any case. So, we need to archive all the data and back it up continuously to keep it save.

3.4 Shall we move to Cloud Computing?

Of Course...

3.5 which model we need? (Public, Private, Community, Hybrid)

Private... More Secure Data...

3.6 What are the criteria to focus on when choosing between different cloud computing providers?

3.6.1 Performance

One of the main concerns for enterprises that are considering cloud computing is performance. Achieving high-speed delivery of applications in the cloud is a multifaceted challenge that requires a holistic approach and an end-to-end view of the application request-response path.

3.6.2 APIs

Another critical aspect of selecting a cloud provider is the application programming interface (API) it exposes for accessing the infrastructure and performing operations such as provisioning and de-provisioning servers. The API is important in a number of ways.

3.6.3 Security and compliance

Two of the biggest barriers for companies considering cloud computing continue to be security and compliance.

Chapter 4

Software Architecture

4.1 What is the best software architecture for the enterprise/organization based on what we studied?

Udemy can use a software architecture such as client-server, MVC, SOA or any other software architecture. It can also use a combination of all.

4.2 How this software architecture helps with facing the mentioned challenges?

As Udemy uses a combination of software architecture patterns, any challenges that face a certain pattern could be resolved with the other pattern.