Shell Bootcamp 2024
3 Reflections for Week #<2>

<Manan Chathli>

Date : 06-Sept-2024

About Me

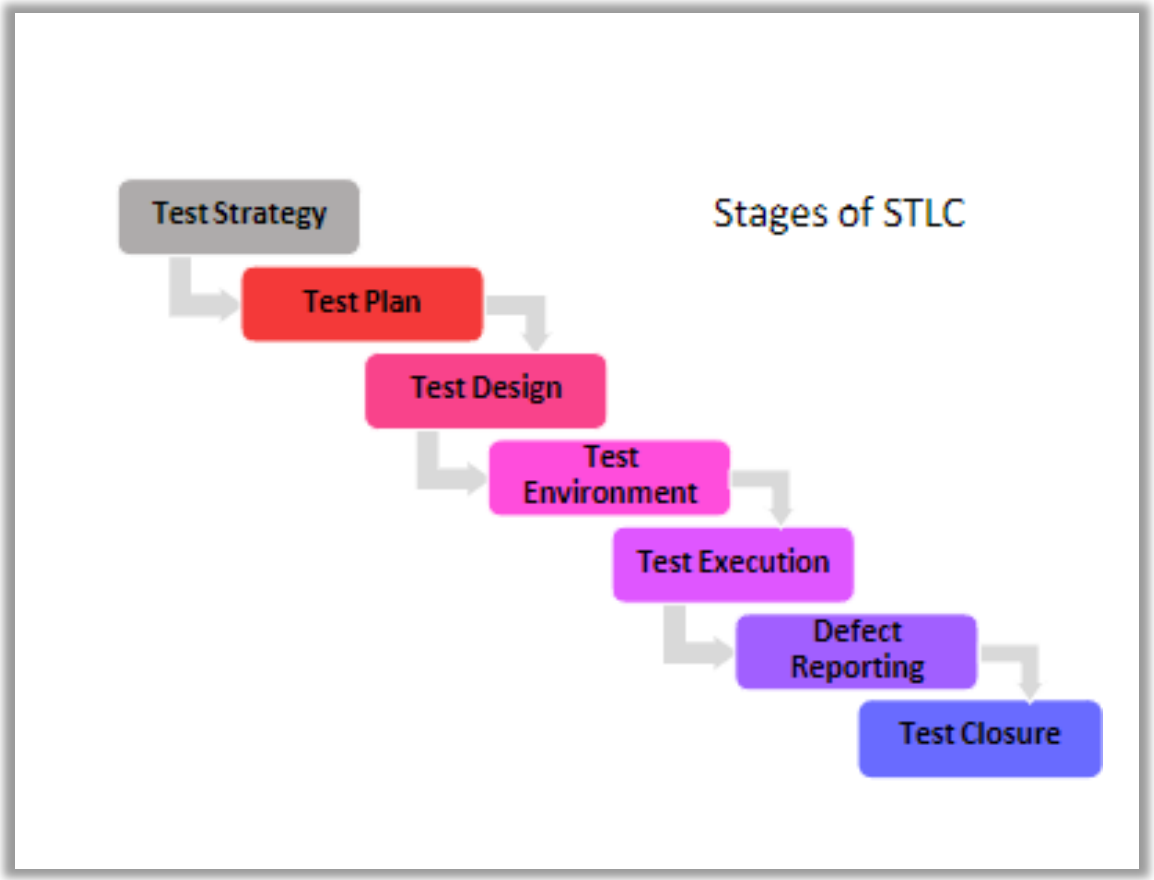
We need to be willing to be comfortable with discomfort in order to grow

My learnings from this week!

unext

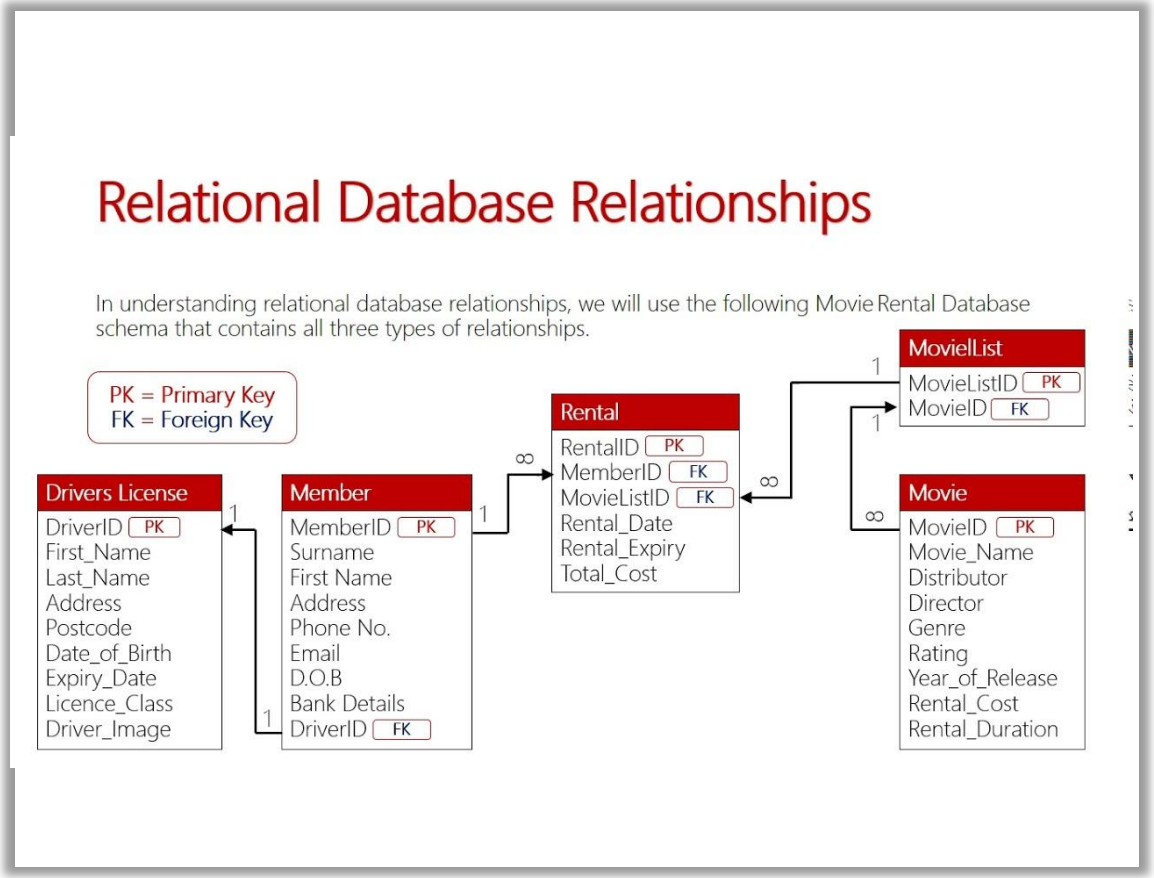
Learning 1 STLC | My takeaways

- Key learning: STLC like SDLC is a entire life cycle of testing activities having proper phases and defined workflow
- Key takeaway: Testing is a not an activity that can be taken lightly and due diligence needs to be done and the set process needs to be followed to ensure a positive outcome
- In the Energy sector where reliability, safety, security and compliance are major issues, a STLC ensures that proper procedures are followed and all aspects of a project are tested leading to increased efficiency and less chance of failure



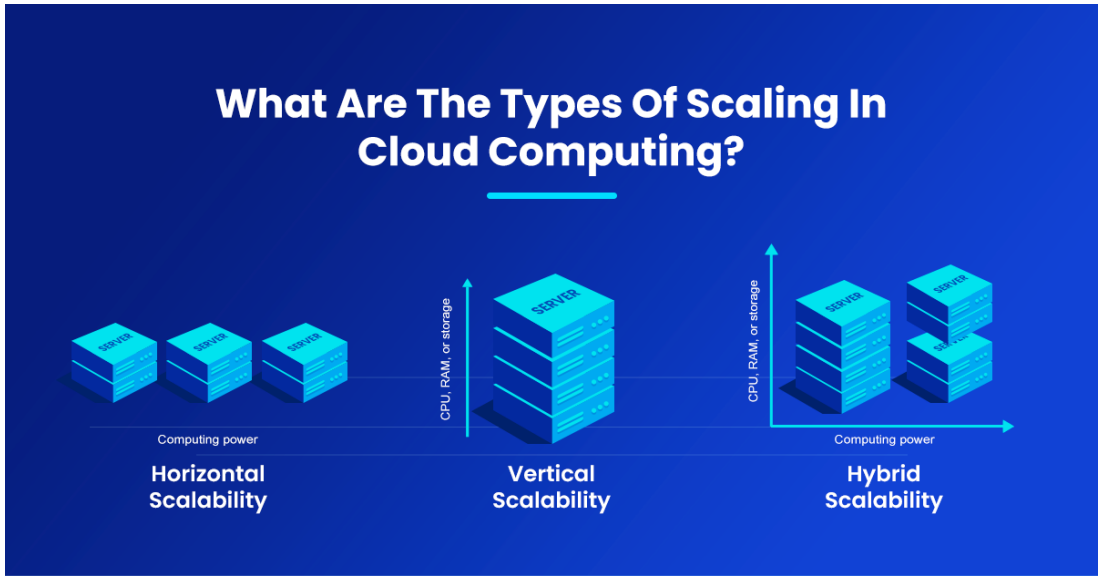
Learning 2 Relational Database| My takeaways

- Key learning: Structed way to analyze data and relate one data table to another data table
- Key takeaway: Efficient and Flexible way to access information
- In the Energy sector where different data streams have to be handled simultaneously, relational databases are used to make big data warehouses



Learning 3 Cloud Scalability | My takeaways

- Key learning: Cloud Scalability gives options of elasticity and efficient resource management in opposition to hardware resources which are difficult to deal
- Key takeaway: Cloud Scalability provides flexibility to scale up or down based on real-time needs, It also ensures applications run smoothly
- In the Energy sector Scalable cloud solutions enable real-time monitoring of energy production, consumption, and distribution.



Relevance of learnings for my organization

Learning 1 STLC | Relevance for Shell

Shell implements this learning by following a structured approach to ensure high quality software delivery. They meticulously implement each phase of the STLC to ensure all critical issues are resolved before deployment

Shell benefits from this learning by delivering systems that are highly safe, reliable and follow the compliances. They are able to find and rectify errors early and easily hence making the system efficient whilst reducing the cost of production too

Learning 2 Relational Databases | Relevance for Shell

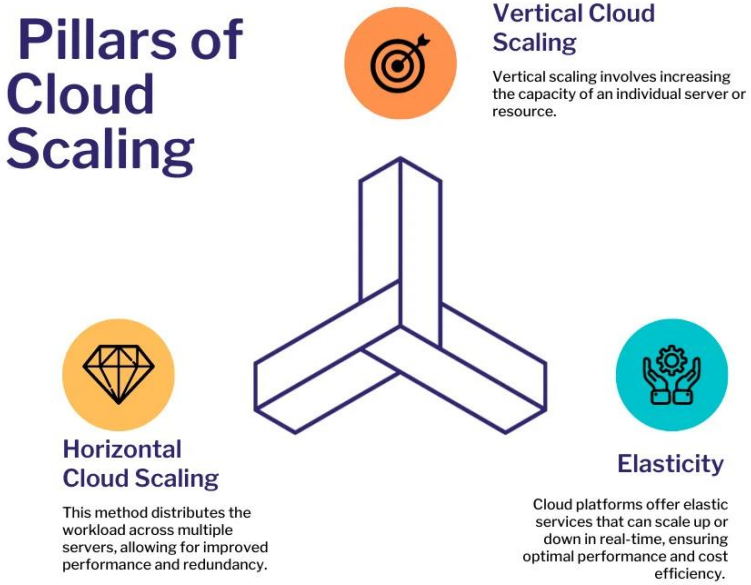
Shell implements this learning by optimizing data management, enhancing data integrity and improving decision making

Shell benefits from this learning by increasing efficiency in data handling operations, gives better data security and gives options of scalability to their data centres

Learning 3 Cloud Scaling | Relevance for Shell

Shell likely integrates cloud scalability learning by implementing dynamic resource management to handle varying workloads efficiently. Adopting scalable cloud solutions to quickly adapt to changing business needs and demands.

Shell benefits from cloud scalability learning by eeducing infrastructure costs through pay-as-you-go models and avoiding over-provisioning. Ensuring high availability and reliability of systems, minimizing downtime and enhancing operational continuity.



Challenges in implementing learning

Challenge faced while implementing Learning 1

Challenges faced while implementing STLC can be ambiguous requirements, test environment setup, test data management and frequent requirement changes

My plan to Overcome: https://github.com/MChathli19/UNextCourse/blob/main/Week2/STLC%20_Challenges

Challenge faced while implementing Learning 2

Challenges faced while implementing Relational Database can include challenges with design, data integrity and consistency, scaling and performance in high load, schema changes and all

My Plan to Overcome:

https://github.com/MChathli19/UNextCourse/blob/main/Week2/RelationalDatabases_Challenges

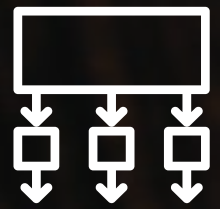
Challenge faced while implementing Learning 3

Challenges while implementing learning cloud scaling are with respect to resource allocation, latency and network bottlenecks, database scalability, cost management and so on.

My plan to Overcome:

https://github.com/MChathli19/UNextCourse/blob/main/Week2/CloudScalability_Challenges

Action Plan



My Action Plan for this Week

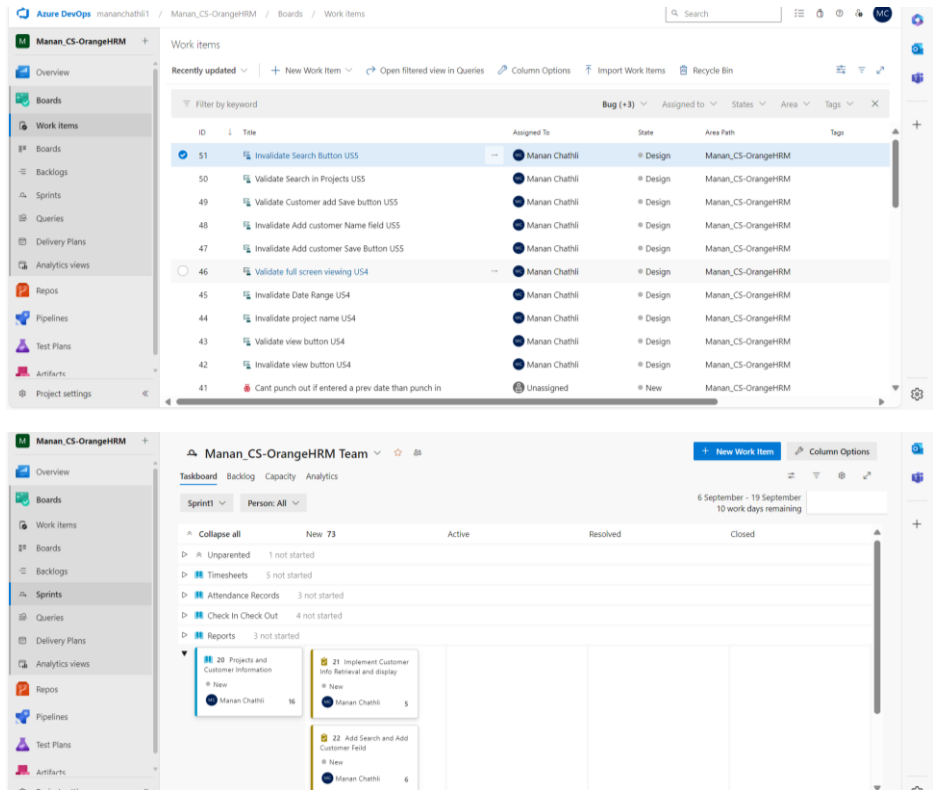
Actions	Timeline	Status
• Identify any challenges that I face in the content • Research Relevant Resources if needed • Revise and Practice • Reflect and Adapt • Stay Motivated	• Learning actions to be implemented in parallel to attending the sessions • Extra Study and Reflection to be done on the weekends if necessary	• Successfully understood all relevant topics, • Solved the challenges that I was facing with respect to the content with the faculty




Learning is also Fun!

Learning is also Fun!

- A group activity conducted this week was for the hands on to Azure Devops, though the task seemed like a simple task, it was quite fun to navigate through the application and figure things out
- Ajay Sir was very engaging and supportive throughout the course. There were many funny incidents where he gave us instructions, and each of us interpreted them differently. During the final presentation, everyone ended up showing completely different things! This experience taught us the importance of team communication and regular stand-ups to ensure everyone stays in sync.



Summary

- Summary: Learnt about the foundational basics of software engineering this week including topics like testing, dbms, cloud and devops. All topics were very interesting and were filled with a lot of hands on giving us a ton of exposure. I am very happy and very thankful to be taught by the Unext expert faculty who helped me a lot throughout this journey

- Importance of topics of upcoming week: SE bootcamp is scheduled for next week where we will delve into topics of coding and will develop on our foundations

- Connectivity of topics from current week: The learnings from this week will help us connect to the topics that use these learnings as a base to develop on.


Thank You