# **Disaster Recovery with IBM Cloud Virtual servers**

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#### **Problem Definition:**

It aims to develop and implement a robust disaster recovery strategy that ensures the preservation of critical data, applications, and infrastructure in the face of unforeseen disruptions, such as hardware failures, natural disasters, or cyberattacks. By establishing reliable backup, replication, and failover mechanisms and defining clear recovery time objectives (RTOs) and recovery point objectives (RPOs), this project seeks to minimize downtime and data loss, thereby bolstering business continuity and resilience within the IBM Cloud virtual server ecosystem.

# **Design Thinking:**

Applying design thinking to the "Disaster Recovery With IBM Cloud virtual servers" project involves a human-centric approach to problem -solving. It encourages us to empathize with the end-users and stakeholders affected by potential disasters, ideate innovative recovery solutions, prototype and test them iteratively. This approach ensures that not only the technical aspects but also the usability, accessibility, and user experience considerations are integrated into the disaster recovery strategy, resulting in a more effective and user-friendly solution in the IBM Cloud virtual server environment.

# **Empathize:**

It entails actively listening to their needs, fears, and expectations when it comes to disaster recovery. By empathizing, we gain valuable insights that help shape a recovery strategy that not only addresses technical requirements but also considers the human elements, ensuring that the solution aligns with the real-world challenges and expectations of those impacted by potential disasters in the IBM Cloud virtual server environment.

### **Define:**

Clearly define the problem: Based on your research, articulate the specific challenges and opportunities that your Disaster Management Tool should address. Consider all the essential factors and fix a clear Goal.

#### **Ideate:**

It encourages brainstorming, conceptualizing new approaches, and thinking outside the box to develop innovative strategies that can effectively address the unique challenges of ensuring data and application continuity within the IBM Cloud virtual server ecosystem. Ideation is a pivotal phase that enables the exploration of a wide range of possibilities before selecting the most promising concepts for further development and implementation.

### Test:

Conduct usability testing: Continuously test the tool with real users throughout the development process. Identify any usability issues, bottlenecks, or areas for improvement.Performance testing: Ensure that the application performs well under various load conditions to guarantee scalability and reliability on IBM Cloud Servers.

# **Implement:**

Develop the full application: Based on the feedback and insights gathered during testing, proceed to build the complete e-commerce application on IBM Cloud Foundry. Implement features that enhance security, scalability, and performance. Integrations: Integrate the application with payment gateways, inventory management systems,

### **Iterate:**

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Iterating the flow of the "Disaster Recovery With IBM Cloud virtual servers" project involves a cyclical process of refining and improving the disaster recovery strategy. It entails continuously assessing and adjusting the backup, replication, and failover mechanisms in response to changing infrastructure and threat landscapes. By regularly reviewing and updating recovery time objectives (RTOs) and recovery point objectives (RPOs), this iterative approach ensures that the disaster recovery plan remains aligned with evolving business needs and technological advancements within the IBM Cloud virtual server environment

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