Project Design Phase

Solution Architecture

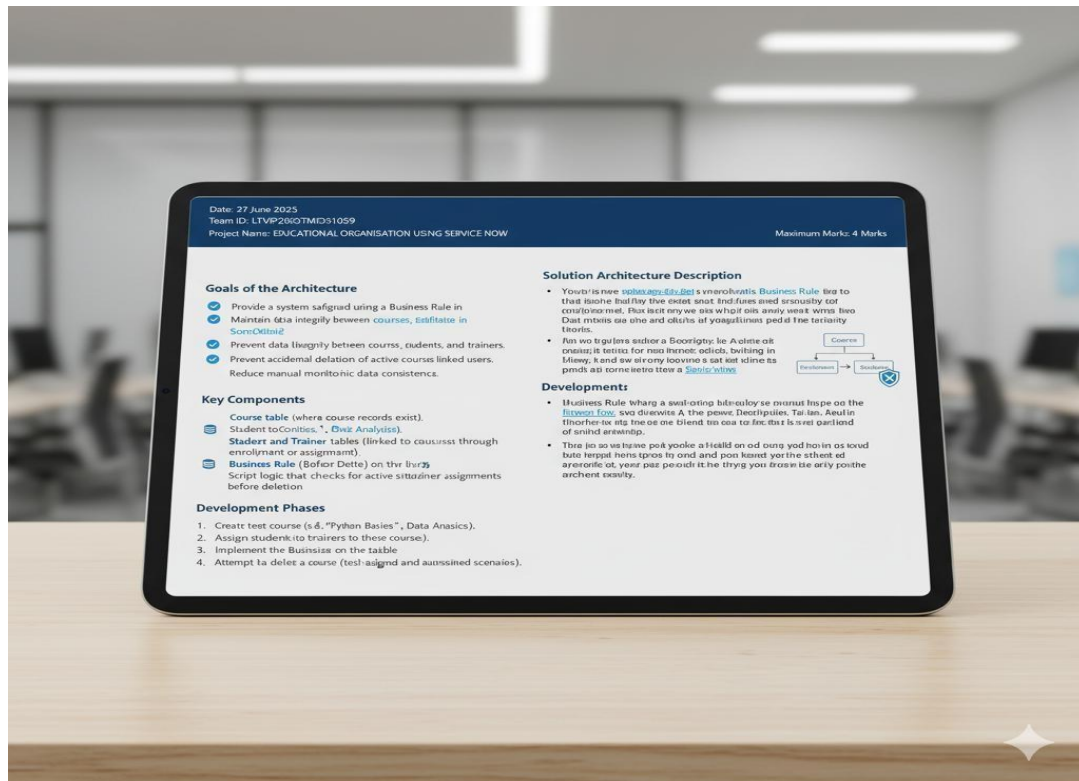| Date	Team ID	Project Name	Maximum Marks
02 NOV 2025	NM2025TMID08585	**EDUCATIONAL ORGANISATION USING SERVICE NOW**	**4 Marks**

Goals of the Architecture:

- Provide a system safeguard using a Business Rule in ServiceNow.
- Maintain data integrity between courses, students, and trainers.
- Prevent accidental deletions of active courses linked to users.
- Reduce manual monitoring for academic data consistency.

Key Components:

- Course table (where course records exist).
- Student and Trainer tables (linked to courses through enrollment or assignment).
- Business Rule (Before Delete) on the Course table.
- Script logic that checks for active student or trainer assignments before deletion.

Development Phases:

1. Create test courses (e.g., "Python Basics", "Data Analytics").

2. Assign students and trainers to these courses.

3. Implement the Business Rule on the Course table.

4. Attempt to delete a course (test both assigned and unassigned scenarios).

Solution Architecture Description:

- The solution architecture is designed to protect course and enrollment data integrity within the ServiceNow platform by implementing a Business Rule that prevents deletion of any course currently assigned to active students or trainers.
- This architecture ensures data consistency between the Course, Student, and Trainer tables by applying a "Before Delete" Business Rule on the Course table.
- The rule automatically checks for any existing associations or enrollments linked to the course. If active dependencies are found, the deletion process is blocked, and the user receives a notification message explaining the reason.

The development process involves:

- Creating sample course and user records.
- Assigning relationships between courses, students, and trainers.
- Applying the business rule logic.
- Testing deletion attempts on both dependent and independent courses.

This architecture minimizes human error, enhances system reliability, and upholds academic accountability within the educational organization.

By leveraging native ServiceNow features, the design remains efficient, scalable, and easy to maintain — ensuring a secure and automated approach to data management.