

Chittagong University of Engineering and Technology
CUET-CSE Digital Skills Training for Students
Venue: IICT, CUET

Final Examination
Level: Intermediate Batch No: I-019

Total Duration: 2 Hours (120 Minutes)

Full Marks: 100

Instructions:

- Complete all tasks using ASP.NET 6.0, SQL Server, React.
 - Submit your relevant files and screenshots of outputs as required.
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Question 1: Project Setup and Routing (60 minutes)

50

1. ASP.Net Web API:

Consider the below relations:

User: UserId, UserName, Email

UserProfile: UserProfileId, UserId, Address, Phone

Deliverables:

a. Set Up the Database Context:

Create a Database Context class called AppDbContext and add the necessary properties to it.

b. Create a Migration for the Models:

Using Entity Framework, generate a migration to create the tables in the database.

c. API Methods:

I. Post: /api/user: to create a user and profile in a transaction.

II. GET /api/user/{id}: to fetch user and profile.

III. PUT /api/user/{id}: to update the user and profile in a transaction.

IV. DELETE /api/user/{id}: to delete user and profile in a transaction.

Provide the necessary screenshot of your Output.

- **Question 2: React Project (60 minutes)** **50**

- **Set Up a React Project:**

Create a React project with vite.

- **Give an example of state management:**

Using redux/recoil/zotai give an example of state management

- **API Call:**

Call APIs you created for question 1 using fetch/axios.