

**UNIVERSITY OF ASIA PACIFIC**

**Department of Computer Science and Engineering**

**Course Title :** Software Engineering

**Course Code :** CSE 321

**Group Member:**

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**Proposal:**

We are a startup company and we need a software that will use NFC for our transport system payments.

**Description:**

Our bus would have a scanning system onboard. Each passenger would scan it with the mobile app while getting on the bus and when getting off. The system would automatically calculate the fare based on the distance and charge with digital payment systems.

**Our Requirements:**

1. App integration with NFC(Near Field Communication) sensor for mobile device and a software for scanner on the bus.

2.A. The app would have a login system with mobile number/emails.

2.B. The app requires built in bKash/rocket API for ride payments.

3.A. The system on the bus would authenticate with the smartphone app and validate the user.

3.B. The system would measure the rider’s ride distance from the point of pick up to the drop point, calculate the fare and then charge from the app.