

Department of CIS Subject: Software Engineering(CIS332) Midterm Assignment, Summer 2020 Prepared by: Md. Aktaruzzaman Pramanik

Because of this recent Corona Epidemic, people are suffering from many problems, sending personal items or any necessary products from one place to another is one of such an issue where people are suffering a lot. Courier services demanding double money than previous time and not providing good services because of heavy pressure. As a result, products are not delivered in time, in some cases products are being damaged and people are suffering.

On the other hand because of this crisis moment, the economy of the country is down, people are losing their jobs, not getting a way of earning livelihood.

Mr. Jonas Kahnwald is a German entrepreneur, currently staying at Bangladesh for some business purpose, he realized the above problem and thinking to invest his resources in Bangladesh using a business idea.

He is planning to create a platform named "PoucheDebo" in Bangladesh where people with valid identity can join by registering to the system by abiding some terms and conditions. Any kind of misuse or betrayal will be penalized strictly while using this platform. People can use that platform for two general intentions, either i) they can send their products in a specific time and date to a particular address, or ii) they can carry those products and safely handover to the receiver and can earn some money fixed by the system.

[Instructions: Give clear and concise answers for every subtask. Use examples if necessary]

- Subtask 1: [Easy level tasks, 11 marks]
 - ✓ Write down at least 5-6 functional requirements for the "PoucheDebo" platform, don't need to follow any format, just list out as bullet points.[5 marks]
 - ✓ Watch this video carefully, think yourself as the character "Anderson" in the video who is an expert and answer the below questions:

i)How do you react to your customer and to your boss?[1 mark]

- ii) Think about every statement that is made by the customer and the "expert." How would you respond? [3 marks]
 - iii) How do you deal with the boss? [2 marks]

• Subtask 2: [Advanced level tasks, 14 marks]

- ✓ Design any **two classes by following the SRP principle** which classes will be necessary for implementing the system of the given scenario. You don't need to provide implementation for the methods, but the classes and their attributes and methods needed to be logical. [6 marks]
- ✓ Create a Data Flow Diagram(minimum 1 level) for the given platform "PoucheDebo".[8 marks]

• Subtask 3: [Technical tasks, 10 marks]

- ✓ Now create a video(maximum length 3 mins) where you will be performing unit testing for 2-3 methods of a class. classes and methods can be created as your wish. In the start of the demonstration, pronounce your ID and name loudly. Upload the video in google drive and attach the link in this document. (Watch this video for download and setup of JUnit in netbeans and watch this class lecture to know how to use JUnit)[5 marks]
- ✓ Write documentation for a single class of the given scenario, create documentation applying Javadoc for that class in HTML format, create a pdf of that documentation, upload in Google drive and attach the link here. Never forget to write your name and ID in the first line of documentation.[5 marks]
 [N.B. Skip this part for now, I will show you after Eid-Ul-Adha how to do this task]

General Instructions:

- ❖ You have to submit the assignment in .docx or .pdf format(name it with your ID, such as 183-16-678.docx), don't zip this file
- Submit the assignment in the Smart Edu LMS Assignment section, the option of submission will be available there very soon.
- ♦ Marks will be deducted accordingly if any plagiarism of work is provided.
- **♦** Last date for submission: **15 August, 2020.**