University of Global Village (UGV)
Department of Computer Science
Course: Software Engineering
Summer 2022

<u>**Project 1**</u>: **Develop a Software Project Management Plan for Automated Ticket Issuing System for Bangladesh Railway (BR)**

<u>**Objective:**</u>
The objective of this project is to introduce students with the concept of software project management plan (planning, estimation and scheduling) and developing such a plan.

<u>**Submission Rules:**</u>
Deadline:	June 8 (Wednesday)
Group:	Group of 5(maximum); choose your project-partners
Submission:	Submit a hard copy of Software Project Management Plan (SPMP) Document
Late Submission:	Not allowed. You will get zero for late submission.
Grading Criteria:	80% Project Plan (should not be more than 10 pages)
	20% Use of tools for scheduling (e.g. MS Excel, MS Project)
	-5% for poor formatting, typing etc.
Reading:	Read books and references on your own. We will cover the **r**elevant topics/materials very soon and will discuss the project in details in the class.
Plagiarism:	100% penalty for all the groups involved in copying each others work (It includes the original producer).

Problem Statement: (Details will be discussed in the class)
Your software firm "**Southtech, Inc**." has been awarded a contract to develop software for automated ticket vending machine for Bangladesh Railway (BR). General specification of the software application is as follows:

"An automated ticket issuing system sells tickets. Users can select their destinations, and insert a credit card and a personal identification number (PIN). The ticket is issued and their credit card account is charged with its cost. When the user presses the start button, a menu display of potential destinations is activated along with a message to the user to select a destination. Once a destination has been selected, users are requested to insert their credit card. The validity of the credit card is checked and the user is then requested to enter a personal identifier number (PIN). When the credit transaction has been validated, the ticket is issued."

You are required to prepare a software project management plan which must contain sections described in the following section:

Software Project Management Plan Template:

1. Title page
2. Revision history page
3. Introduction (brief and specific; should not be more than half page)
4. Process Model
   SW development life cycle model
      a. Choose a model
      b. Justify why you chose this model
5. List of tasks (work break down structure)
6. Estimation for each task
   Assumption: 1 Engineer works for 7 hours a day and 5 days a week. Engineers have average experience.
7. Schedule the tasks
   Use MS Excel as scheduling tool. You may choose to use other freeware/demo tool
   Assume that only 85% time of an engineer per day will be used to develop software. Other 15% will be overhead e.g. reading emails, attending meetings, process improvement activities etc.
8. Prepare list of milestones
9. Staffing Plan (Assign tasks to Software Engineers)
10. Monitoring and Controlling Mechanism
11. Risk Management
    List 2-3 risks and state risk mitigation plan against each risk
12. List of Deliverables
13. Schedule Tracking Process
14. Defect Tracking Process
15. Postmortem