# SIT315- Seminar 1- Real-time Systems - part 1

#### **Overview**

Welcome to the first seminar of SIT315. In this seminar, we will discuss some of the concepts covered in the Monday Lecture in more detail.

Form a group of 5-6 students and work on the following activities.

### **Submission Details**

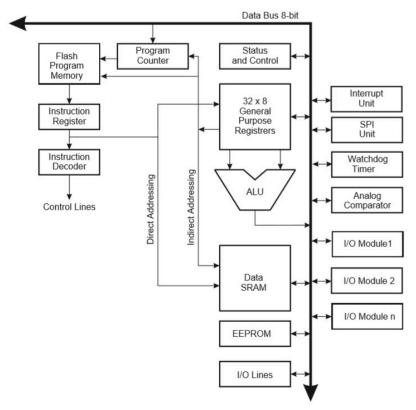
Each student should submit the answers in the onTrack individually. Please write the names of all of your group members in the first page of your submission.

## Activity 1- Von Neumann VS Harvard architecture

- 1. List at least four main differences between Von Neumann and Harvard architecture.
- 2. Discuss advantages and disadvantages of *Harvard* architecture.

## **Activity 2- Arduino board architecture**

Below is the architecture of the Arduino board(ATmega328p).



- 1. Based on the diagram, what architecture is used in the Arduino board? Justify your answer.
- 2. Identify different types of memory in the Arduino architecture, discuss their usage, and sort them based on speed.

After finishing the activites, use the reamining time of the seminar to work on the Pass part of Module 1 Tasks. You can find the task description in OnTrack Module Task.