

**SCV3533 MULTIMEDIA DATA PROCESSING**  
**ASSIGNMENT2: Speech Processing Experiment**  
**Semester 2 20212022**

**Objective**

The objective of the assignment is for students to be able to

1. Work in group
2. Read speech data and identify its features in time domain
3. Utilize the time domain features for speech segmentation task / experiment.
4. Communicate experimental result in oral presentation.

**Task**

This assignment requires students individually to do the following tasks

1. Every Group will be given a set of speech data. ( Some Group may have the same set)
2. Understand speech parameters / features in time domain namely the energy and the crossing rate and others.
3. Develop algorithms by utilizing the parameters to do connected digit segmentation task.
4. Perform experiments.
5. Report and present them

**Suggestion Steps**

1. Attend class or you will not understand how to do the task.
2. Study the speech data set given to you.
  - a. There will be 10 patterns per set per speaker.
  - b. Observes the utterances of the digits per speaker and genders in term of the energy and other parameters you learned in class.
3. Report on your observations anything that you think can help you in doing the task.
4. Developed algorithms using the parameters. Your algorithm need to be to some extend unique / new. It can be new in term of the parameters setting, hybrid, threshold etc. (we will discussed in class)
5. Design experimental set up to do the experiments.
6. Report.
7. Present.

**Submission :**

This assignment requires submission of the following

1. Report of the experiments
2. Slide presentation of no more than 10 minutes.
3. Oral presentation.

### Dataset for Experiments

	Group	Dataset
1	Group1	Set A & Set G
2	Group2	Set B & Set D
3	Group3	Set A & Set C
4	Group4	Set D & Set E
5	Group5	Set E & Set C
6	Group6	Set B & Set F
7	Group7	Set C & Set G
8	Group8	Set H & Set G
9	Group9	Set E & Set H
10	Group10	Set B & Set G
11	Group11	Set C & Set F
12	Group12	Set G & Set F