Bangladesh University of Engineering and Technology Department of Computer Science and Engineering CSE308: Software Engineering Sessional July 2022 Semester

Online-3 on Structural Design Patterns

Date: February 13, 2023

Problem Statement

Suppose that you have programmed a script generator that generates English texts from audio files in English. Now, you want to upgrade the script generator to generate English texts from audio files in Bangla. That is, your script generator will, first, translate Bangla speeches in audio files to corresponding English speeches and then, generate English texts from the translated English speeches. You have to implement the necessary classes, following an appropriate design pattern, to capture the scenario above. For the sake of simplicity, you may assume the following.

- Users will input quoted texts as speeches, either in English or Bangla, to your script generator.
- For English speeches, you will just remove both the opening and closing quotation marks to generate the corresponding scripts in English.
- For Bangla speeches, you will, at first, remove both the opening and closing quotation marks. Then, you will translate Bangla texts to texts in English in order to generate the corresponding scripts.
- You may safely assume that, in this evaluation, you only have to translate the following Bangla words.
 - o Ami (I), Amra(We), Bhat(Rice), Roti(Bread), Khai(Eat), and Banai(Prepare).

For further clarification, you may consider the following examples.

Input	Output
"Hello world!"	Hello world!
"Amra bhat khai."	We eat rice.
"The sky is clear today."	The sky is clear today.
"Ami roti banai."	I prepare bread.