COMP212 Programming 3
Assignment 4
Fall 2018
Instructor: Abidin Akkok

Question 1:

Create a program that will simulate a web browsing session.

The program window should contain the following objects:
1. An input text field that will accept a string (web address)
2. Two buttons: "PREV" and "NEXT"
3. A display field

They should function as the following:
- INPUT TEXT FIELD: The web address (URL) will be typed into the input text field and the RETURN key should be pressed to accept the input. When the RETURN key is pressed, the input received will be the active URL.
- PREV BUTTON: If pressed, the one previous active web address will be set as the active URL. Should be disabled if the active URL is the first one.
- NEXT BUTTON: If pressed, the web address that was active prior to pushing PREV button will be set as the active URL. Should be disabled if the active URL is the last one.
- DISPLAY FIELD: Should read "Displayed web page <active URL>. This needs to be refreshed every time a new URL is entered or when one of the PREV and NEXT buttons is pressed.

Rules:
1. Whenever the active URL is changed the display field needs to be refreshed.
2. The URL entered via the input text field will always be the last web address.

Hint: You should implement two stacks, one for going backward, and one for going forward.
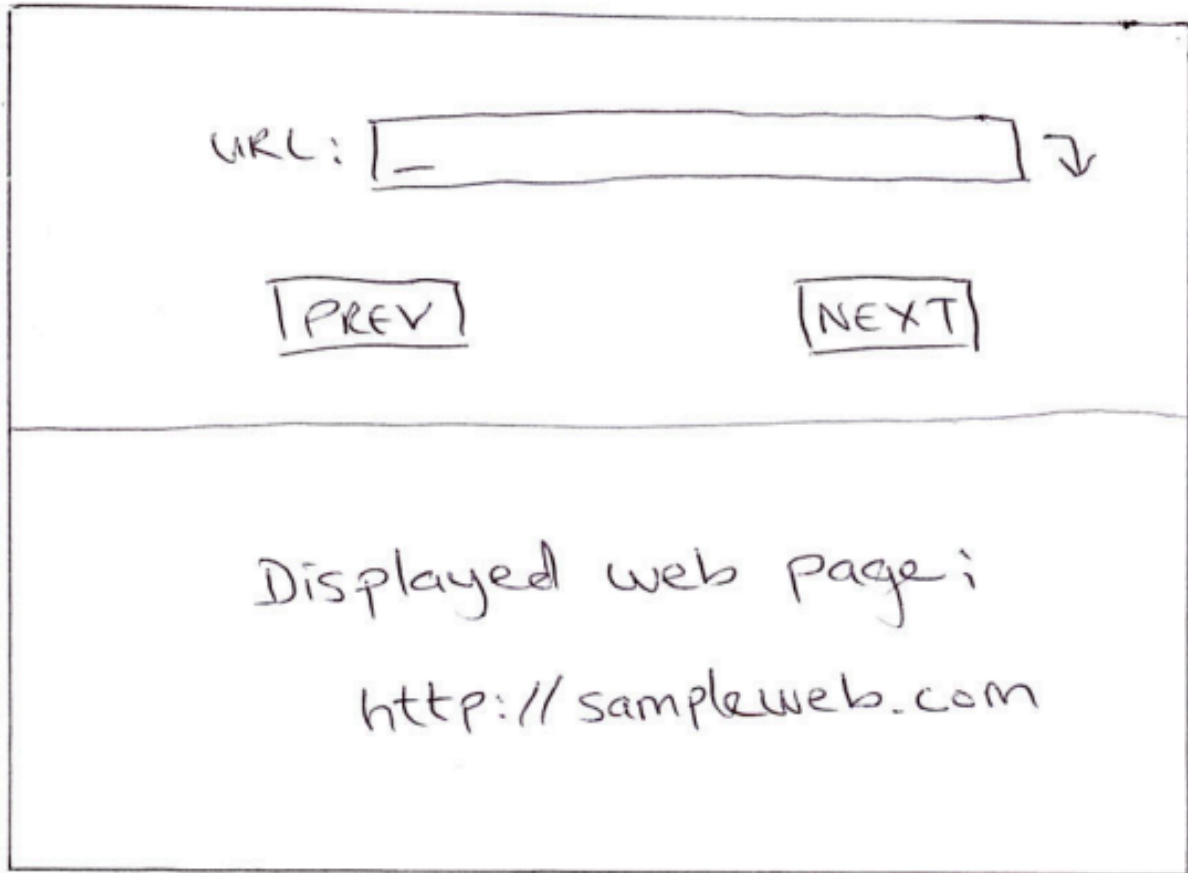
Figure 1: Sample screen layout for Question 1

Question 2:

Create a program that will simulate bank customers coming to a branch.

Your program should contain the following objects:
1. A NEW button for incoming customers
2. A pop-up entry window for entering name and selecting the service
3. SERVING display fields for each service type
4. A NEXT button for each employee to accept the next customer in line
5. A display field for each employee showing the name of the customer being served

Available services:
1. Deposit money
2. Withdraw money
3. Apply for a Credit Card

4. Make Credit Card payment
5. Apply for a Line of Credit
6. Other

Rules:
1. Manager will accept only the customers with Other service needs
2. Teller will accept customers with the following service needs in the order they came to the branch:
   a. Deposit money
   b. Withdraw money
   c. Make credit card payment
   d. Other services (only if nobody is waiting for one of the above teller services)
3. Credit Officer will accept customers with the following service needs in the order they came to the branch:
   a. Credit card application
   b. Line of credit application
   c. Other services (only if nobody is waiting for one of the above credit services)

Hint: You should implement three queues

Figure 2: Sample screen layout for Question 2