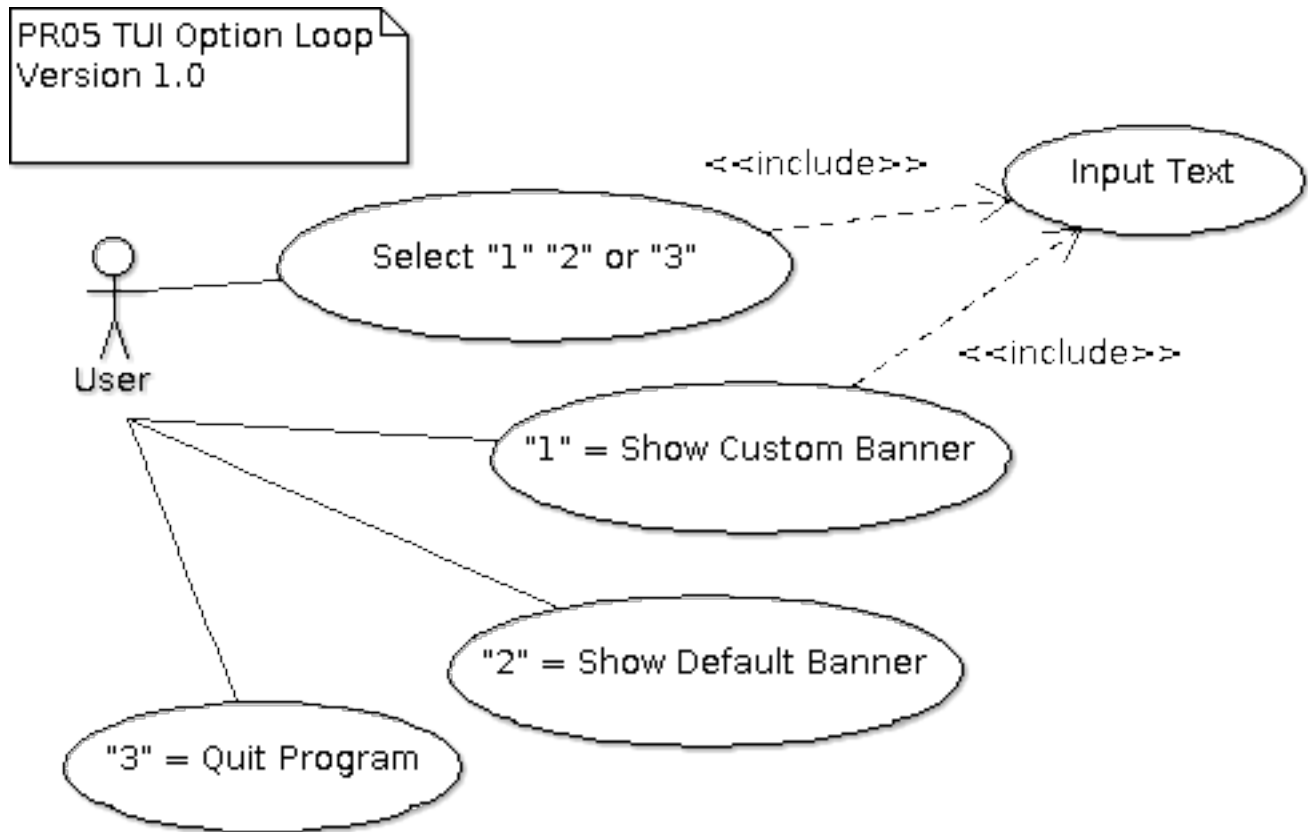


Problem Domain:	Textual User Interface ("TUI")
Mission Summary:	Create an "Input Option Loop"
Prerequisite:	Completion of "Python 1000" (available at Udemy.com)
Your Script Name:	PR05_MenuChoices.py
Solution Name:	PR05S_MenuChoices.py
Version:	1.0

Synopsis

Once activated, Textual User Interfaces can allow users to choose between several options.

In this exercise, we will create a program that will "loop" until a specific option-string has been entered.



Please note that pure string options are to be both collected, as well as used throughout this application¹.

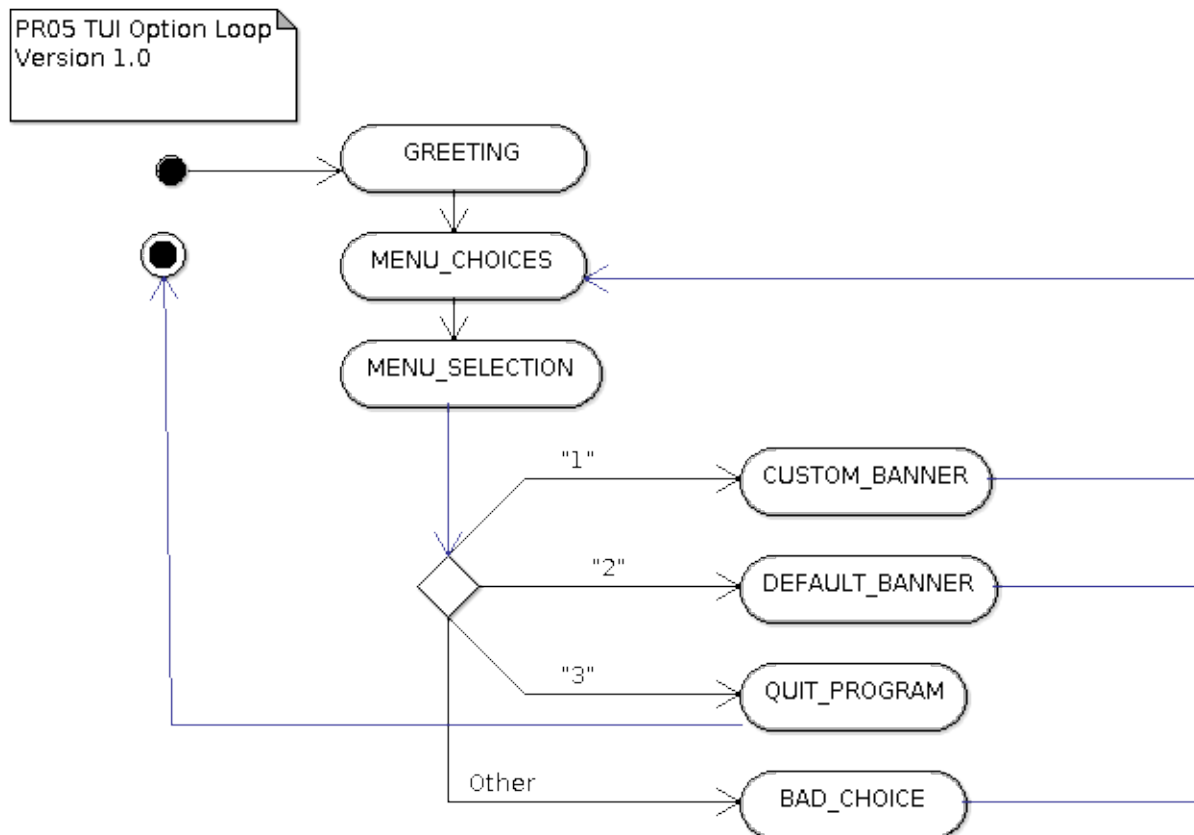
Requirements

- 1) Create a script named PR05_MenuChoices.py
- 2) Review the Activity Diagram located in the "**Related Diagrams**" section below
- 3) Match the following terms & requirements (or "states") to those in the Activity Diagram:
- 4) GREETING:
 - A) Display "WELCOME to PR05!"
 - B) Display three (3) empty lines

- 5) MENU_CHOICES:
 - A) Option "CUSTOM_BANNER"
 - 1) Present as option "1.) Display Custom Banner"
 - 2) Allows user to input a custom message to be displayed as a banner
 - B) Option "DEFAULT_BANNER"
 - 1) Present as option "2.) Display Default Banner"
 - 2) Allows user to display "Hello User!"
 - C) Option "QUIT_PROGRAM"
 - 1) Present as option "3.) Quit Program"
 - 2) Allows user to quit the program / break the main loop
 - D) Condition "BAD_CHOICE"
 - 1) The entry of any other text shall display the message "Bad Choice"
 - 2) The BAD_CHOICE message shall be displayed upon a single line
 - 3) After the BAD_CHOICE message has been displayed, the program will re-display (loop to / resume) the MENU_CHOICES operation
- 6) MENU_SELECTION:
 - A) The user need only input "1", "2", or "3" followed by the "enter" key
 - B) The use of the enter key is required
- 7) BONUS
 - A) Re-use one of the BANNER functions created for Python 1000
 - B) Change CUSTOM_BANNER to display the current date & time as a banner

Related Diagrams

The main Activity Diagram depicts a graphical summary of the requirements, as well as a reasonably demonstrative operational overview:



i In order to avoid type-conversion errors / exceptions, the conversion from textual input-strings to other types (int, etc.) is NOT to be used. The use of Exceptions will be covered in Python 2000.