BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

School of Computing and Academic Studies
Programs: CST

Assignments #1

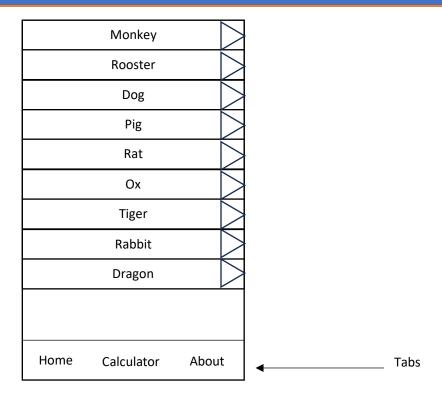COMP4977
Assignment 1 due: Sun Oct 19, 2025, at 11:59 pm

Overview

This assignment will be done in pairs of two students. Your lab instructor decides on the selection process.

The purpose of this assignment is to familiarize you with architecting a complete iOS application, so you understand views and navigation.

The concept of this assignment is based on the Asian Zodiac. The iOS application will have three tabs (Home, Calculator and About):

Home Screen:

Although the draft design above does not show all animals, your app should have a comprehensive list of animals. Also, the tabs should display both text and appropriate images.

The starting screen is as shown above. You will list all the animals of the zodiac in a Navigation View. When the user clicks on one of the rows, they will see another screen with details about that zodiac characteristic. For data on characteristics of each sign, refer to the following link:

https://www.goway.com/inspiration/unlocking-12-animals-chinese-zodiac-which-animal-are-you

Navigation Destination

Zodiac

Rat

Charming, innovative, and intelligent
Forthright, inquisitive, and intrusive but always in a disarmingly honest way
Excels in business, alert to opportunities.
Easy to get along with, hardworking and thrifty.
Generous to those you are fond of
Can be easily agitated but maintains self-control, gaining many friends.
Bright, fun-loving, social, occasionally critical, or grouchy
Female rats may be especially frugal, but usually not with their

Other Tabs

The *Calculator* tab would provide an input field that accepts a numeric year. When the user clicks on the button, the name of the animal and image are displayed.

Finally, the *About* tab shows the names and ID numbers of students who worked on this assignment.

Additional Requirements

- Be generous in creating sub-views. Each significant sub-view is to be refactored into a separate Swift file.
- Each Swift-UI sub-view has a working preview provider.
- If there are any technical details missing, try to make realistic assumptions.
- Customize a unique color scheme.
- Delete unnecessary code.
- Implement proper validations on all input data.
- Your app must have a unique icon
- You are encouraged to go beyond what has been asked for, in terms of functionality and app design. However, you should satisfy the basic mentioned features at a minimum.

Testing your app

The marker will test your assignment with the iPhone 17 emulator.

Submission:

- Clean your solution before submitting it to learning-hub. This is done in Xcode: Product >> Clean build folder
- As you upload your solution to Learning Hub (D2L), put the following information into the comment:
  - each student must describe contributions made
  - what you have NOT completed
  - any major challenges
  - any special instructions for testing your app
- Assignments must be zipped (.zip extension) and uploaded to the drop-box folder for Assignment 1 in D2L (Learning Hub). Do not use any compression utility other than plain old ZIP.
- Your ZIP file will include all directories and files comprising your entire android app.

COMP4977 Assignment 1 marking guide:

Task	Max Mark	Actual Mark
Home screen functionality	10	
Calculation screen functionality	10	
Appearance & Architecture • Look & Feel • Layout • Color Scheme • Architecture • Unique logo • Scroll where necessary • Etc….	7	
Other • student Names BCIT ID numbers on About screen • Design and coding conventions • D2L comments • Etc….	3	
TOTAL:	**30**	