Potential Answers to Lab 1

# Part One

1. Using a pen and a paper, I expect students to be able to know how the design should be done as follow

Text, whiteboard

Description automatically generated Text, whiteboard

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1. The answer is available as Make\_the\_bet.html & Take\_the\_bet.html file. The students need to be able to implement the basic design of question 1.

A picture containing text

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1. Here, the student needs to create CSS and images folder and can create a navigation bar that allows them to move between pages “take a bet” and “make a bet.” They should also be able to be creative in adapting bootstrap CSS and implementing it into their html webpage. I expect the result to look something like so:  
     
   Graphical user interface, application

   Description automatically generated



  


# Part Two

1. Students are expected to read the jupyter notebook file provided. Furthermore, they will have to go through the cells of this notebook and practice the codes provided. The discussion will support them to conduct the second questions available in part two of this Lab session.
2. Students are expected to summarize concepts from lectures alongside codes to demonstrate the characteristics of hash functions and how they are related to the blockchain framework. The discussion needs to be thoroughly thought of and somehow integrate the hashing importance into the concept of digital value.   
     
   The student should know the mathematical characteristics and properties of the hash function. Where are they used in blockchain, and how do they play an essential role in encrypting value.  
     
     
     
     
     
     
     
   
3. Students are expected to discuss the PoW (proof of work) algorithm. This is done by reading the main textbook and going through the lecture notes.   
     
   Potential Answer:  
     
     
     
     
     
   Graphical user interface, text, application

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