# Assignment 2

## September 2020

## 1 Introduction

Barbossa's Brethren managed to acquire *Queen Anne's Revenge*. They now want to recruit sailors for a journey across the seas and they offer hefty joining bonuses to attract young sailors. The joyous sailors decide to spend all their bonus before the long voyage. Help the sailors lose their money by gambling. You know how the saying goes: *Once ye lose yer first hand, ye get hooked!*

They need a platform for gambling, and looking at the sea shell on your resume, they have approached you. You have to **develop an online platform on blockchain**, so that they do not make you walk the plank. Since the pirates do not know how to use a terminal, they want you to also **develop a front end for the dApp**.

The game they will be playing is called *Liar's dice* (link to game description). You are free to make a variant of the vanilla game to make it more interesting.

## 2 Marking Scheme

### 2.1 Correctness

Your programming logic should be correct (20%)

### 2.2 Security

For keeping the bets a secret (10%)

### 2.3 Comments

All functions in the code should be well explained with Doxygen comments (10%)

### 2.4 Correct Visibility and Modifiers

All functions should be assigned proper visibility and modifiers as required (10%)

## 2.5   Test Cases

Write 4 distinct test cases to show the correctness of your code (5%). We will also be testing your code with our own test cases (15%)

## 2.6   Front End

The final dApp should look good and should be easy to use (30%)