

## School of Science & Technology COSC2659 – IOS Development

# **Assignment 2**

## Zanzibar

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#### I. Introduction

Zanzibar is a dice game for 2 or more players, and uses lots of chips and an interesting scoring mechanism.

#### II. Objective

Dice is an easy to have, but there a lot of fun games using this little thing to play. As research on Internet, I find out this amazing game to play. The component needed for the game is 3 dices and some coin, chip, candy, etc. for scoring.

#### III. Rules to play

The first player may roll the dice up to three times in an attempt to get as high a score as possible. They may stop rolling after the first or second roll if they wish.

The other players, in turn, then try to roll a higher score in the same number or fewer rolls than the first player.

Once all players have had a turn, the player with the lowest score receives a number of chips from the other players. The number of chips they receive depends on the hand of the player who rolled the highest score. The loser receives:

- 1 chip if the highest score is a points total
- 2 chips if the highest score is 1,2,3
- 3 chips if the highest score is three-of-a-kind
- 4 chips if the highest score is 4,5,6 (Zanzibar)

The winner of the previous round rolls first in the next round.

Players continue playing rounds until one player has no chips remaining win the game

#### For scoring:

- 4,5,6 Zanzibar = 1000 points
- 1,1,1 = 900 points
- 2,2,2 = 800 points
- 3,3,3 = 700 points
- 4,4,4 = 600 points
- 5,5,5 = 500 points
- 6,6,6 = 400 points
- 1,2,3 = 300 points

All other combinations rank as a sum of the three dice added together:

- 1 = 100 points
- 6 = 60 points
- 2 = 2 points
- 3 = 3 points
- 4 = 4 points
- 5 = 5 points

Above is the tutorial for the normal mode. There are additionally 2 other modes:

#### - Easy Mode

This variant is the same as regular Zanzibar except the sum of combinations are only their face value. Ones and sixes are only worth 1 point and 6 points respectively instead of 100 points and 60 points.

#### Hard Mode

This variant is the same as regular Zanzibar except the losing player receives a number of chips from each other player based on each player's score instead of just the winner's score.

#### IV. Main features & Extra

- Main features:

I have all 4 views: Menu view, Leaderboard view, Game view (EasyPlay, NormalPlay, HardPlay), How to play view. I have sounds when open the app, when leaderboard appear, when roll dice, and when winning the game

Extra:

The Zanzibar App can select the level of game in 3 difficulties (easy, normal, hard) It can work well in light and dark mode.

This app can work well on iPad and MacOS.

The app does not have a Continue button to save play data. However, I have made a simple one of it to store the leaderboard using UserDefault

## V. <u>Screenshots of different views of the app.</u>

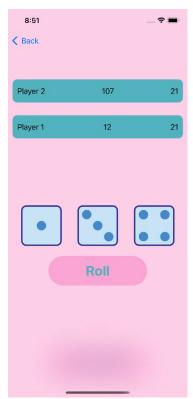
The menu view in the start of the app:



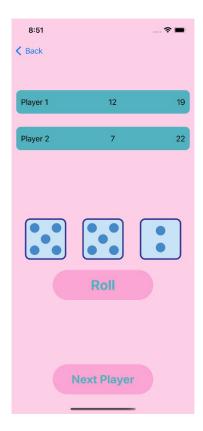
## The Setting View to change setting:



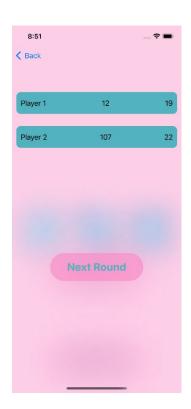
### The Play View at the begin of the round:



Play View after one round (list of players sorted):



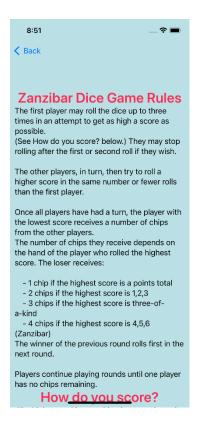
The Play View when end round:



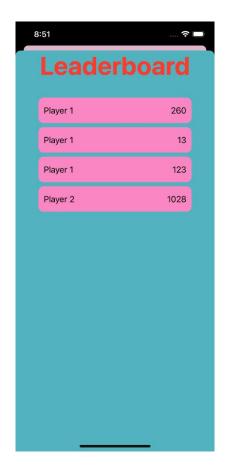
When there is a player with 0 chip, the end game View will pop up:



#### How to Play View:



#### Leaderboard View:



Link to onedrive for video demo: COSC2659 Assignment2 s3819342