

- **Project Title:** TAX COLLECTION
- **Name:** Le, Ho Tin Nghia
- **Project Type:** Individual
- **Project Description:** Inspired by a Vietnamese folk game from 11th century, this iOS application brings the game onto phone screen for the very first time. The first version of this application allows two people to play on the same device until one becomes the winner.

Set Up:

The game board is made up of five Banks in each district (colored black) with \$5 in each Bank. There are also two Treasuries (colored orange) carrying \$10 each. All the money available on game board is the city tax that needs to be collected by collectors from the two districts (which are two players).

Each player has a Store (colored purple) to his/her side for recording the total dollar amount that they has collected.

Objective:

The object of the game is to collect as many dollars as possible before the game ends.

Game Play:

1. The player who chooses to be Player 1 will go first. This player will become District A collector (Figure 1)



FIGURE 1

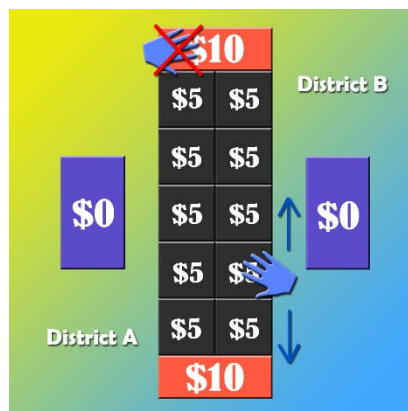


FIGURE 2



FIGURE 3



FIGURE 4

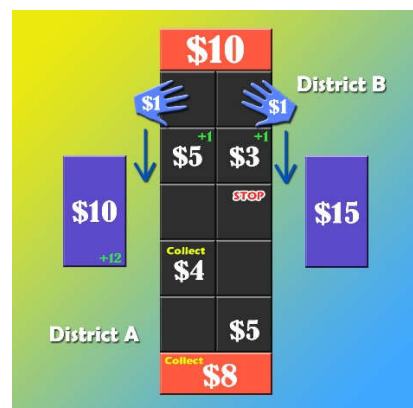


FIGURE 5

2. He/she then chooses any Bank from his/her district (the one on his/her side only) and picks up all the dollars inside to deposit one dollar (\$1) to other Banks or Treasuries clockwise or counter-clockwise (Figure 2).
3. After the player deposited the last dollar, situations are as follows:

- ❖ If the next spot is another Bank with dollars inside, the collector will continue to pick up all of those dollars and keep depositing in the same direction he/she has chosen (Figure 3).
 - ❖ If the next spot is a Treasury with dollars inside, the collector has to STOP and loses his/her turn (Figure 4 right side).
 - ❖ If the next spot is an empty Bank (from any District) or an empty Treasury, but the spot after contains dollars, the player can collect all of those dollars inside that spot (whether it can be a Bank or a Treasury) (Figure 3 and Figure 4 left side). After collecting, situations are as follows:
 - If the next spot is with dollars inside (whether it can be a Bank or a Treasury), the player has to STOP and loses his/her turn.
 - If the next spot is empty and the spot after that contains dollars, then the player can again collect all the dollars inside that spot and the same pattern can continue (Figure 5 left side).
 - ❖ If two or more of the next spots are empty, the player has to STOP and loses his/her turn (Figure 5 right side).
4. Once the dollars are collected, the player will put the money into the corresponding Store of his/her District.
 5. In case it is his/her turn but the player has no dollar in all of his/her five Banks, he/she has to either take five dollars from his/her Store or borrow five dollars from the other collector to put one dollar in each of his/her five Banks to be able to continue.
 6. The game continues until:
 - ❖ Every dollar on the board is collected. Or...
 - ❖ Every dollar in both Treasuries is collected. In this case, the remaining dollars in the Banks will be put into the corresponding Stores of the collectors.
 7. The winner is the collector with more dollars in his/her Store in the end.
 - **API features:**
 - The application will be developed using Xcode and UI is mainly created in Storyboard Interface Builder. The developer will utilize widgets that are available in Xcode such as Label, Button, Text Field, etc. to design the game board.
 - Some ideas are to design each Bank as a Button so that player can touch it to pick up the money. The two arrows also perform as Buttons so that player can choose to deposit money clockwise or counter-clockwise. All the dollar numbers in the Banks and Treasuries as well as Stores will be performed as labels so that the dollar amount can change responding the moves of players.
 - Notifications may pop up to declare winner or to let players know what they should do or how much dollars has been collected.
 - The developer will conduct Auto Layout to make sure the game can be displayed correctly on different phone screen sizes.
 - The developer is still on the way to research and find more UI features that can be applied to use in this application
 - Multi-touch events are triggered at any time while the game is going on to increase or decrease the game loop music.