

# Group 12

## Project Proposal

CS 319 - 01

### Group Members

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### Project Description

#### Title

“μMonopoly”

#### Summary

We decided on working on a desktop based, Java application which will simulate the famous board game of Monopoly. The basic rules are:

- It is a multiplayer game, where each player can only play in turn, not simultaneously.
- The users have a token and a certain amount of money.
  - The user is able to purchase a token upgrade such as a gold token or platinum token. Gold tokens decrease the amount of rent which is needed to pay to the competitor by 10% and the platinum token decreases the amount of money the user needs to pay in order to purchase the land, build houses and build hotels by 10%.
- The users roll two dice and move on the board according to the sum of the dice faces. In case they roll doubles they have the chance to roll again. Three consecutive doubles send the user to Jail.
  - The user is able to purchase a dice upgrade such as gold or platinum dice. Gold dice make the user roll twice and platinum dice make the user move two times the sum of the roll.
- In order to go out of the Jail the users have to roll doubles the next turn, wait for three turns or use a Get-Out-Of-Jail card.
- As the users move along the squares they can either buy a new square (land) if it is not taken otherwise pay the rent to the owning user.
- The amount of rent is specified in each property card of the land. As the user advances in the game the rents become higher. The owning user has the choice to build houses in the

properties that they own in order to increase the rent. After building four houses, the user can upgrade to a hotel, which has a considerably higher rent.

- There are special squares in the board:
  - Tax Squares: the user has to pay some money to the bank.
  - Utility Squares: the amount of rent is 40 times the sum of the dice roll if only one is owned and 100 times the sum of the dice if both are owned.
  - Railroads: the rent is 250 if one is owned, 500 if two, 750 if three and 1000 if all four are owned.
  - Chance and Community Chest: when landing in these squares the user picks a chance or community chest card which can have instructions like pay a tax, gather some money, Get-Out-Of-Jail cards, move to a certain square etc.
- Every time the users pass through the starting point they collect some money.