COMP3211 User Manual

GROUP INFORMATION

Group number: 13

Group members:

1. Tanya Sanjay BUDHRANI
2. Tanchhoma LIMBU
3. Tahmin ANOWER
4. Jyotsna VENKATESAN

GETTING STARTED

Launch the game to see the main menu. The game supports 2-6 players and uses a simplified 20-square board with 4-sided dice.

MAIN MENU

The main menu offers five options:

1. Start New Game
2. Load Game
3. Design New Board
4. Customize Existing Board
5. Exit

Enter the corresponding number (1-5) to select an option.

GAME CONTROLS

During gameplay, you'll have the following options:

1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game

5. Exit to Main Menu

PLAYING THE GAME

Starting a New Game

1. Select "Start New Game" (Option 1)
2. Enter the number of players (2-6)
3. For each player:
    a. Enter a name or press Enter for a random name
        i. Names must be unique

Screenshot showing the start game process:

```
Monopoly Game Menu:
1. Start New Game
2. Load Game
3. Design New Board
4. Customize Existing Board
5. Exit
Enter your choice: 1
Enter the number of players: 3
Enter name for Player 1 (or press Enter for random name): Olivia
Enter name for Player 2 (or press Enter for random name): James
Enter name for Player 3 (or press Enter for random name): Henry
```

Player Turn

1. Each turn begins with rolling the dice
2. The total roll determines how many spaces you move
3. Players start with $1500
4. Landing on different squares triggers different events

Screenshot demonstrating a player's turn:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
Olivia rolled 4 + 2 = 6
Olivia can buy Shek O for $400. Do you want to buy? (y/n): |
```

Player Status Format

Player status is displayed as:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 2
Olivia - $1500 - Position: 7
James - $1500 - Position: 1
Henry - $1500 - Position: 1
```

The "In Jail" status only appears when applicable.

Next player

Selecting 'View next player' displays the next player in turn to play.

Screenshot showing the next player feature:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 3
Next player: s
```

SPECIAL SQUARES

Go (Position 1)

1. Collect $1500 when landing on or passing
2. No action required from player

Screenshot showing a player getting $1500 from landing on Go:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
james rolled 4 + 2 = 6
james receives $1500 salary for passing GO
james can buy Wan Chai for $700. Do you want to buy? (y/n):
```

Property Squares

1. When landing on an unowned property:
    a. Enter 'y' to buy
    b. Enter 'n' to pass
2. When landing on another player's property:
    a. Rent is automatically deducted
    b. No action required
3. When landing on one's own property:
    a. Nothing happens

Screenshot showing a player paying another player rent after landing on their property:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
james rolled 3 + 3 = 6
james pays $25 rent to olivia
```

Screenshot showing a player buying an unowned property square:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
James rolled 3 + 3 = 6
James can buy Sai Kung for $400. Do you want to buy? (y/n): y
James bought Sai Kung for $400
```

Screenshot showing a player landing on their own property:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
James rolled 1 + 3 = 4
James owns Tsing Yi - no rent to pay
```

Chance (Positions 4, 9, 13, 19)

1. Random event occurs automatically
2. May gain up to $200 or lose up to $300

Screenshot showing a player losing money after landing on a Chance square:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
henry rolled 4 + 1 = 5
henry loses $220 from Chance
```

Income Tax (Position 6)

1. Automatically pays 10% of current money (rounded down to nearest 10)

Screenshot showing a player paying income tax:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
james rolled 4 + 3 = 7
james receives $1500 salary for passing GO
james landed on Income Tax
james pays $670 in tax
```

Jail/Just Visiting (Position 11)

1. When in jail:
   a. Option to pay $150 fine (enter 'y' or 'n')
   b. If not paying, must roll doubles or wait 3 turns
      i. After 3 turns, $150 fine is mandatory
```

Screenshot showing a player visiting jail:

```
  1. Roll Dice
  2. View All Players Status
  3. View Next Player
  4. Save Game
  5. Exit to Main Menu
  Enter your choice: 1
  James rolled 1 + 4 = 5
  James is just visiting jail
```

Screenshot showing a player leaving jail after rolling a double:

```
  1. Roll Dice
  2. View All Players Status
  3. View Next Player
  4. Save Game
  5. Exit to Main Menu
  Enter your choice: 1
  olivia is in jail.
  Do you want to pay $150 to get out of jail? (y/n): n
  olivia rolled 4 + 4
  olivia got out of jail with doubles!
  olivia gains $150 from Chance
```

Screenshot showing a player paying $150 to get out of jail:

```
  1. Roll Dice
  2. View All Players Status
  3. View Next Player
  4. Save Game
  5. Exit to Main Menu
  Enter your choice: 1
  henry is in jail.
  Do you want to pay $150 to get out of jail? (y/n): y
  henry pays $150 to get out of jail
  henry rolled 2 + 2 = 4
  henry can buy Tai Po for $500. Do you want to buy? (y/n): n
  henry chose not to buy Tai Po
```

Go to Jail (Position 16)

1. Automatically moves player to Jail
2. No action required

Screenshot of a player going to jail:

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 1
henry rolled 1 + 2 = 3
henry goes to jail
```

Free Parking (Position 6)

1. No effect
2. No action required

Screenshot of a player going to Free Parking:

```
  1. Roll Dice
  2. View All Players Status
  3. View Next Player
  4. Save Game
  5. Exit to Main Menu
  Enter your choice: 1
  James rolled 3 + 2 = 5
  James lands on Free Parking. Nothing happens.
```

SAVING AND LOADING

Saving a Game

1. Select "Save Game" during play
2. Enter a filename (e.g., "savegame.dat")
3. Game state will be saved to file

Screenshot showing the user saving their game to "savegame.dat":

```
1. Roll Dice
2. View All Players Status
3. View Next Player
4. Save Game
5. Exit to Main Menu
Enter your choice: 4
Enter filename to save the game: savegame
Game saved successfully!
```

Loading a Game

1. Select "Load Game" from main menu
2. Enter the filename to load
3. Game will resume from saved state

Screenshot showing a user loading a game called "savegame.dat":

```
Monopoly Game Menu:
1. Start New Game
2. Load Game
3. Design New Board
4. Customize Existing Board
5. Exit
Enter your choice: 2
Enter the filename to load the game from: savegame
Game loaded successfully!
```

BOARD CUSTOMIZATION

Creating/Modifying Squares

1. Select position (1-20)
2. Enter square name
3. Choose square type
4. For properties, enter:
   a. Property price
   b. Property rent amount

Screenshot showing the process of modifying a square:

```
Board Customization:
1. Modify Square
2. Save Board
3. Exit to Main Menu
Enter your choice: 1
Enter the position of the square to modify (1-20): 2
Enter the new name for the square: Beijing
Select the type of square:
1. Property
2. Go
3. Chance
4. Income Tax
5. Jail
6. Go to Jail
7. Free Parking
Enter your choice: 1
Enter property price: 400
Enter property rent: 30
Square modified successfully!
```

ERROR HANDLING

Invalid Inputs

1. **Invalid menu selections:** Message "Invalid choice. Please try again."
2. **Invalid filenames:** Error message with details
3. **Insufficient funds:** Automatic bankruptcy procedure
4. **Invalid player count:** Must be 2-6 players

Bankruptcy

1. Player automatically retires when money goes below $0
2. All owned properties become available
3. Game ends if only one player remains

Game End Conditions

Game ends when:

1. Only one player remains
2. Maximum rounds (100) reached
3. Winner determined by highest money total

For any unexpected errors, the game will display an appropriate error message and return to a safe state (usually the main menu).