Player

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| Method | Function  Parameters | Function Description | Test No. | Test Case | Expected output | Actual Output | Pass or Fail (P/F) |
| setPosition() | int – amount to be incremented to player’s position | This method moves the player position based on the parameter. | 1 | Added a value above zero and result is below 31 | Player is at position 1 and rolled 6. Player is now at position 7 | Player is at position 1 and rolled 6. Player is now at position 7. | P |
|  |  |  | 2 | Added a value above zero and result is above 31 | Player is at position 30 and rolled 5. Player is now at position 3 | Player is at position 30 and rolled 5. Player is now at position 3 | P |
| roll() | GameBoard – object which contains the different game elements | This method rolls a die that produces a random value from 1-6 and moves player based on that. Afterwards, the user is presented with possible actions. | 1 | Dice roll moves player past start. | Player is given $200 by the bank. Properties passed over also have their foot traffic incremented. | Player is given $200 by the bank. Properties passed over also have their foot traffic incremented. | P |
|  |  |  | 2 | Dice roll moves player onto random land. | action() is called and presents player with possible actions. Properties passed over also have their foot traffic incremented. | Player is presented with options possible on the tile. Properties passed over also have their foot traffic incremented. | P |
|  |  |  | 3 | Player is in jail before dice roll. | Player is fined $50 before moving. | Player is fined $50 before moving. | P |
|  |  |  | 4 | Player is fined and cannot pay. | Player becomes bankrupt and the game ends. | Player becomes bankrupt and the game ends. | P |
|  |  |  | 5 | Dice roll moves player past different lands of property type. | The different properties’ foot traffic is incremented. | The different properties’ foot traffic is incremented. | P |
| action() | GameBoard – object which contains the different game elements | This method calls the appropriate methods for the different types of land in the board. | 1 | Player lands at income/luxury space | Player pays the tax computed by triggerEvent() | Player pays the tax computed by triggerEvent() | P |
|  |  |  | 2 | Player lands at chance space | Player gets a card due to triggerEvent() | Player gets a card due to triggerEvent() | P |
|  |  |  | 3 | Player lands at jail | Player is fined $50 at the start of his next turn due to triggerEvent() | Player is fined $50 at the start of his next turn due to triggerEvent() | P |
|  |  |  | 4 | Player lands at start | Bank pays players $200 due to triggerEvent() | Bank pays players $200 due to triggerEvent() | P |
|  |  |  | 5 | Player lands at community space | Player pays $50 to bank due to triggerEvent() | Player pays $50 to bank due to triggerEvent() | P |
|  |  |  | 6 | Player lands at free parking | Player’s turn ends due to triggerEvent() | Player’s turn ends due to triggerEvent() | P |
|  |  |  | 5 | Player lands at railroad/utility/property | Player is asked if he wishes to purchase the railroad/utility/property if he has the funds | Player is asked if he wishes to purchase the railroad/utility/property if he has the funds | P |
|  |  |  | 6 | Player lands at railroad/utility/property he already owns and eligibleDev() is false | Player is asked if he wishes to trade only | Player is asked if he wishes to trade only | P |
|  |  |  | 7 | Player lands at railroad/utility/property he already owns and eligibleDev() is true | Player can develop land due to develop() or trade using trade() | Player can develop land due to develop() or trade using trade() | P |
|  |  |  | 8 | Player lands at railroad/utility/property and has no funds to purchase said land. | Player is asked if he wishes to trade only if he has any properties to trade due to trade(). His turn ends otherwise. | Player is asked if he wishes to trade only if he has any properties to trade due to trade(). His turn ends otherwise. | P |
| isMine() | GameBoard – object which contains the different game elements | This method checks if the player owns the land they are currently on | 1 | Player lands at land they don’t own. | Returns false | Returns false | P |
|  |  |  | 2 | Player lands at land they own. | Returns true | Returns true | P |
| purchase() | GameBoard – object which contains the different game elements | This method purchases the land that the user is currently on | 1 | Method is called in action() | Land is purchased, owner is set to the player that purchased, and is added to player’s list of properties. | Land is purchased, owner is set to the player that purchased, and is added to player’s list of properties. | P |
| develop() | GameBoard – object which contains the different game elements | This method develops the land that the | 1 | Method is called in action() | Property is developed. Development level incremented by 1. Foot traffic is unchanged. | Property is developed. Development level incremented by 1. Foot traffic is unchanged. | p |
| eligibleDev() | GameBoard – object which contains the different game elements | This method checks if the property player is on is eligible for development | 1 | Rent collected in property is enough and foot traffic for property is reached. Player also has enough funds. | Returns true | Returns true | P |
|  |  |  | 2 | Rent collected in property is enough but foot traffic for property has not been reached. Player also has enough funds. | Returns true | Returns true | P |
|  |  |  | 3 | Neither rent collected or foot traffic is sufficient for it to be eligible, but player has enough funds for development | Returns false | Returns false | P |
|  |  |  | 4 | Rent collected in property is enough and/or foot traffic for property is reached but player does not have enough funds for development | Returns false | Returns false | P |
| trade() | GameBoard – object which contains the different game elements | Trades properties with chosen player’s property | 1 | Player chooses player to trade with, property they will give, and property which they want from other player | The owners of both properties are swapped and are removed/added to their new owner’s properties list. | The owners of both properties are swapped and are removed/added to their new owner’s properties list. | p |