

RealEstate Requirements Specification

User Stories

Version 1.2
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I. Introduction

This system is a Monopoly-like computer game called RealEstate. RealEstate provides several features we can see in the Monopoly board game. This document describes the requirements of RealEstate.

Title: Enter Player Info		
Acceptance Test: <code>enterPlayerInfo1</code>	Priority: 1	Story Points: 1
Right after the game starts, the Player Information dialog will prompt the players to enter the number of players (between 2 and 8). Each player will then be prompted for their name, which may not be an empty string. If Cancel is pressed the game exits gracefully.		

Title: View Information		
Acceptance Test: <code>viewInformation</code>	Priority: 1	Story Points: 2
The players can see their status, including their names, money, and properties on the game board. The attributes of the cells, including the names, the owners, the number of houses, and the price, is displayed on the game board.		

Title: <i>Move Player</i>		
Acceptance Test: <i>playerMovement1</i>	Priority: 1	Story Points: 1
A player moves based on the dice roll (two dice, each with six faces). When the user reaches the end of the board, he or she cycles around.		

Title: <i>Move Players in Turns</i>		
Acceptance Test: <i>playerMovement2</i>	Priority: 1	Story Points: 1
The players should play in turns.		

Title: <i>Pass Go</i>		
Acceptance Test: <i>passGo2</i>	Priority: 1	Story Points: 2
When a player passes or lands on the <i>GO</i> cell, the bank gives the player \$200.		

Title: <i>Free Parking</i>		
Acceptance Test: <i>freeParking</i>	Priority: 2	Story Points: 1
When a player lands on <i>Free Parking</i> , nothing happens.		

Title: <i>Go To Jail</i>		
Acceptance Test: <i>goToJail1</i>	Priority: 2	Story Points: 2
When a user lands on the "Go to Jail" cell, the player goes directly to jail, does not pass go, and does not collect \$200. However, a player may land on the Jail cell and be "Just Visiting" (i.e. not in jail). A player may only be in jail if they land on the "Go to Jail" cell or are told to go to jail by a card.		

Title: <i>Get Out of Jail</i>		
Acceptance Test: <code>getOutOfJail1</code>	Priority: 2	Story Points: 2
<p>When a player is in Jail, he must pay 50 dollars to get out of jail in the next turn. If he or she does not have enough money, he or she is out of the game, and the cells he or she owns become available without any houses.</p>		

Title: Purchase Property		
Acceptance Test: <code>purchaseProperty1</code>	Priority: 1	Story Points: 2
<p>When a player lands on a property cell, and it is available, the player may purchase the property if the player has enough money. The price is the land value of that property. A player cannot purchase a property that is already purchased by other players. Also, the Go cell cannot be purchased.</p>		

Title: Pay Rent		
Acceptance Test: <code>payRent1</code>	Priority: 2	Story Points: 1
<p>When a player (A) lands on a property owned by another player (B), A must pay rent to B. The level of rent paid is a base level of rent, unless the owner has a monopoly or houses/hotel.</p>		

Title: Pay Rent on Series		
Acceptance Test: <code>payRent2</code>	Priority: 2	Story Points: 2
<p>When a player (A) lands on a property owned by another player (B) and B owns all of the properties in a color group (a series), A must pay B twice the base level of rent.</p>		

Title: Pay Rent and Bankruptcy		
Acceptance Test: payRent3	Priority: 2	Story Points: 2
If player B owes player A more money than player B currently has, player B is bankrupt, and must give all of their property to player A .		

Title: Trade Properties		
Acceptance Test: tradeAccept, tradeDecline	Priority: 3	Story Points: 3
If player B wishes to purchase a property from player A, player B will name an amount of money to pay player A for the property they wish to own. Player A can decide to accept or decline the offer.		

Title: Buy Railroad		
Acceptance Test: railroad1	Priority: 1	Story Points: 1
The land value of all railroads are the same. The price and base rent of the railroads are set by the game board. There can be no more than 4 railroads on a game board.		

Title: Pay Rent to Railroad		
Acceptance Test: railroad2	Priority: 3	Story Points: 2
When player A lands on player B's railroad, A pays rent to B based on the number of railroads B owns. If the base rent of a railroad is R, and the number of the railroads B owns is N, the amount of rent A needs to pay B is $R * 2^{N-1}$.		

Title: Buy Utility		
Acceptance Test: utility1	Priority: 1	Story Points: 1
The land value of the utilities is the same. The price and base rent of the utilities are set by the game board. There can be no more than 2 utilities on a game board.		

Title: Pay Rent to Utility		
Acceptance Test: utility2	Priority: 3	Story Points: 2
<p>When player A lands on player B's utility, A pays rent to B based a dice roll. If player B owns 1 utility, A pays 4 times the dice roll. If player B owns 2 utilities, A pays 10 times the dice roll. There can only be two utilities on a game board.</p>		

Title: Buy House		
Acceptance Test: buyHouse1	Priority: 2	Story Points: 2
<p>A player has a series when he purchases all the properties of a color group. When a player has a series of a color group, he can buy houses for those properties at the beginning of his turn. Player cannot purchase more than 5 houses on any given monopoly.</p>		

Title: Pay Rent on Property with Houses		
Acceptance Test: payRentHouse1	Priority: 2	Story Points: 2
<p>When a player (A) lands on a property owned by another player (B) and the property has houses, the rent A pays to B is (base rent * (number of houses + 1)).</p>		

Title: Draw Jail Card		
Acceptance Test: communityChest1	Priority: 2	Story Points: 2
<p>When a player lands on a Community Chest or Chance cell, the player draws a card from the Community Chest or Chance. If the card is a Jail card, the player goes to Jail without getting paid when passing the Go cell.</p>		

Title: Draw Lose Money Card		
Acceptance Test: communityChest2	Priority: 2	Story Points: 1
<p>When a player lands on a Community Chest or Chance cell, the player draws a card from the Community Chest or Chance. If the card is a lose money card, the player pays the money to the bank. If he does not have enough money, he is out of the game, and the cells he owns become available without any houses.</p>		

Title: Draw Gain Money Card		
Acceptance Test: communityChest3	Priority: 2	Story Points: 1
<p>When a player lands on a Community Chest or Chance cell, the player draws a card from the Community Chest or Chance. If the card is a gain money card, the player gets the money from the bank.</p>		

Title: Draw Move Player Card		
Acceptance Test: communityChest4	Priority: 2	Story Points: 2
<p>When a player lands on a Community Chest or Chance cell, the player draws a card from the Community Chest or Chance. If the card is a move player card, the player goes to the specified cell. If the player passes go, he or she is paid \$200 from the bank.</p>		

Document Revision History:

Version	1.2
Name(s)	Sarah Smith
Date	April 18, 2006
Change Description	Minor clarifications of requirements, added Pay Rent to Properties with Houses user story

Version	1.1
Name(s)	Sarah Smith
Date	August 22, 2005
Change Description	Added Enter Player Info and View Information User Stories Updates acceptance test case names.

Version	1.0
Name(s)	Dright Ho
Date	July 16, 2004

Change Description	Initial Document
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