

Design Deliverables

Class Diagram

1. Show how all associations are implemented as referential attributes. All association lines should now be represented as arrows.
2. Show the declaration of all attributes (names, data types).
3. Show the signatures (parameter names and types) and return types for all operations.
4. There probably won't be enough room in the class diagram to show 2 and 3 above, so I would recommend that you show this detail in a separate page for each class.

Sequence Diagrams for the following scenarios:

1. Alice is on Short Line. It is her turn. She rolls 8 (6 and 2), and moves to Baltic Avenue, which she owns. Since she passes GO, she is awarded \$200.
2. On her next turn, Alice rolls a 6 (doubles: 3 and 3). This takes her to Connecticut Avenue, which is owned by Bob. Bob owns all of the properties in that color group, so the rent is doubled. Alice currently has \$650 in cash. Alice pays the \$24 of rent to Bob. On her next roll, she gets 8 (doubles again, 4 and 4). This takes her to Community Chest, which in our game is a "do nothing" square. On her next roll, she gets doubles again, 2 (1 and 1). Instead of advancing to New York avenue, she goes to Jail.
3. Bob is on Free Parking and rolls a 6 (5 and 1). This takes him to Atlantic Avenue, which is unowned. Bob decides to buy the property. He has enough money on hand and is able to purchase the property for \$260
4. Chuck is on the Short Line railroad and rolls 3. He lands on Luxury Tax, and owes \$75 to the bank. He only has \$50 in his account. All of his properties are mortgaged. He goes bankrupt.
5. Devra is on the B&O railroad, rolls 5 (3 and 2) and lands on "Go To Jail" and goes to jail.
6. Eddie is on Baltic avenue, rolls a 4 (3 and 1), and lands on Reading Railroad, which is owned by Alice. Alice owns Reading Railroad, Short Line, and B&O Railroad. Since she owns three railroads, the rent that Eddie pays to Alice is \$100.
7. Alice pays \$50 to get out of jail.
8. Chuck owns all of the properties in the red color group, and currently has three houses on each of them. He wants to buy another house for Illinois avenue, but there are no more houses available from the bank (they are all on other properties).
9. It is Devra's next turn after landing in jail. She rolls doubles (4 and 4). She gets out of jail, and rolls 9 (4 and 5). She owns New York avenue already, so nothing else happens.
10. Alice uses some of her cash to unmortgage Pennsylvania avenue.
11. Later in the game, Devra finds herself once again in jail. It is now her third try for doubles. She rolls 10 (6 and 4). She is forced to pay \$50 from her cash. She must advance to Free Parking.