

Deadwood

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January 30, 2015

Introduction

Below is a design standard for implementing Deadwood, a game where players are actors making money and earning credits by acting on Wild West movie sets. The rules of the game are located at the URL:

<http://www.cheapass.com/node/37>

Purpose

The purpose of this document is to describe the high level design of the Deadwood software. A few tips on implementation can be found in the UML sequence and class diagrams, but not much of the implementation is specified for the programmer.

Scope

This document is meant for a high level template of the implementation of the Deadwood software. Important classes and class relations are defined, as well as the structure of method calls needed to implement the various use cases found in the Deadwood Use Case Document. For ease of exposition, and to simplify the programmer's task, the use case End Day has been added in order to clarify the rather complicated sub-alternate structure found in the use cases for acting. In all other respects this document follows the analysis laid out in the Deadwood Use Case Document.

Organization

The first section presents a class diagram illustrating the class structure and overall class relationships of the Deadwood software. Then the local dynamics within the game are demonstrated by class diagrams between the objects involved in particular use cases. Each local class diagram is followed by a sequence diagram illustrating the basic structure of implementation for the full set of use cases.

1 Overall Class Diagram

The class structure we have developed is motivated by the following considerations, developed during game play.

The board itself has players, spaces, and a game deck. Spaces come in three different varieties: The trailers, the casting office, and sets. Sets have scenes and fixed roles, and further scenes have roles of their own.

The purpose of the various functions and data elements of the classes will become clear once we delve into the dynamics of game play which the use cases describe.

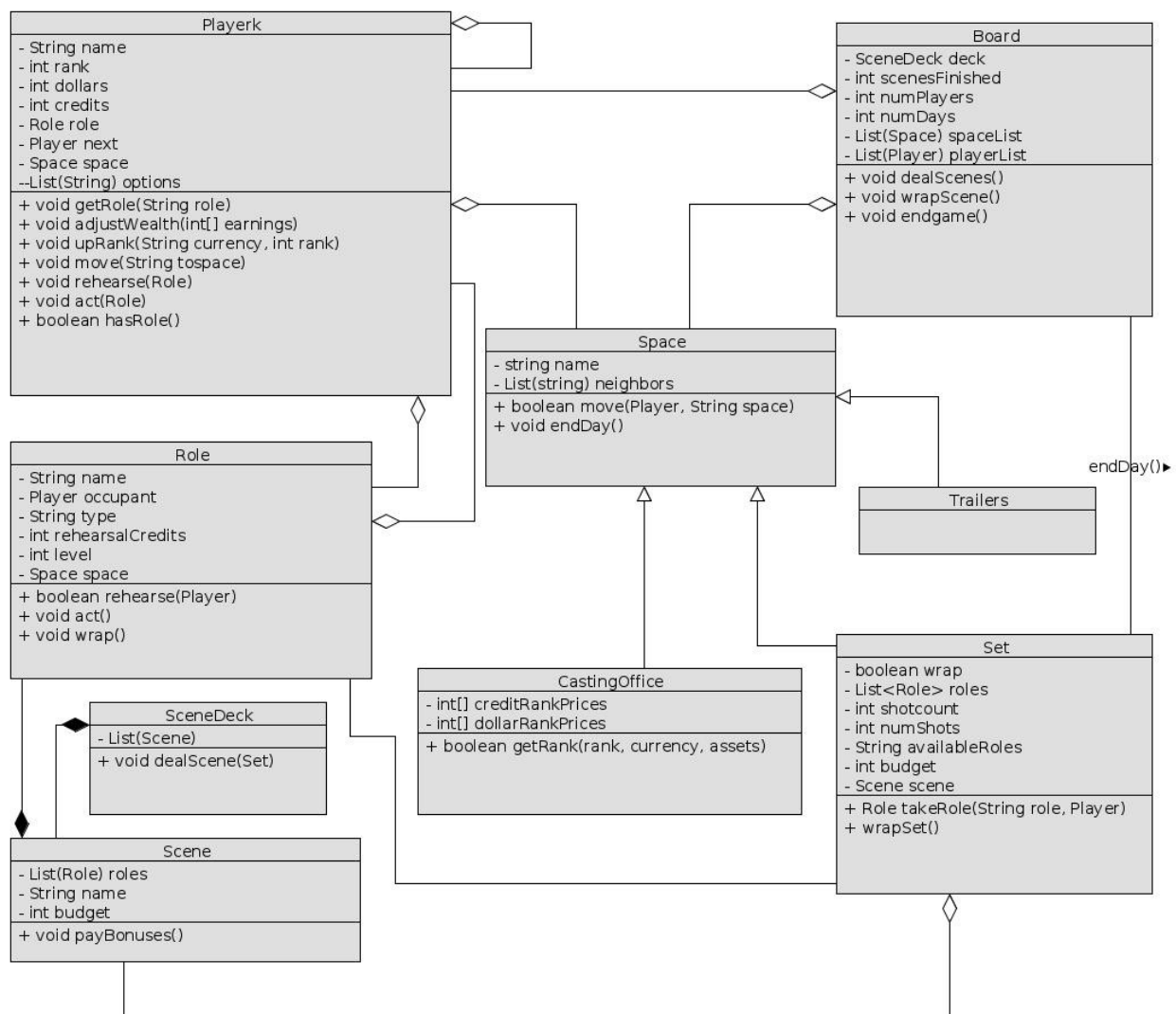
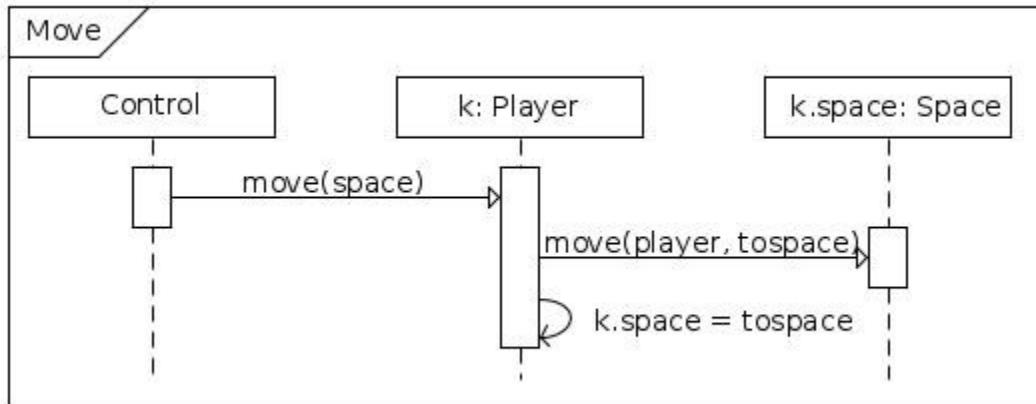


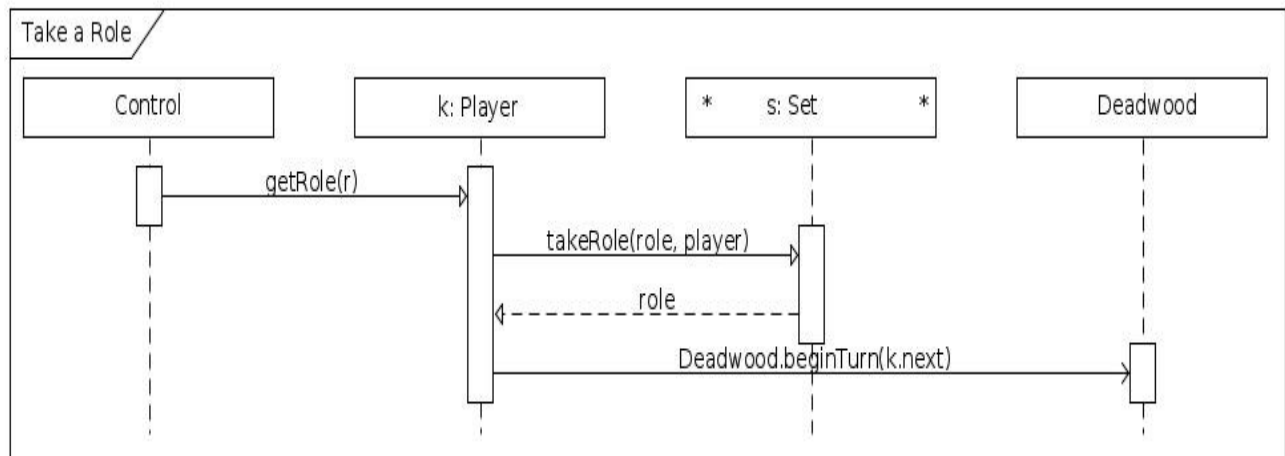
Figure 1: Deadwood Class Diagram

2 Use Cases

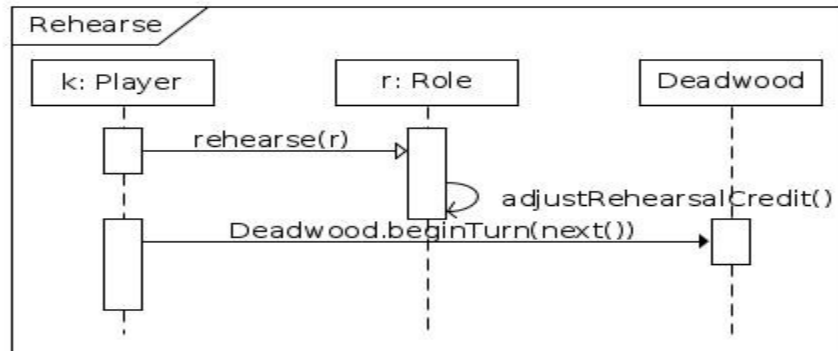
Move Sequence Diagram



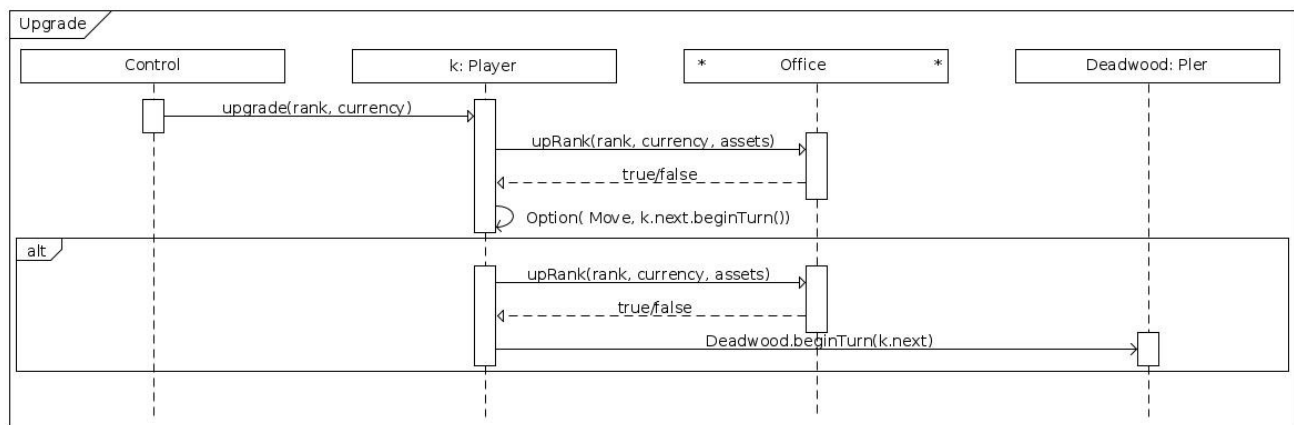
Take a Role Sequence Diagram



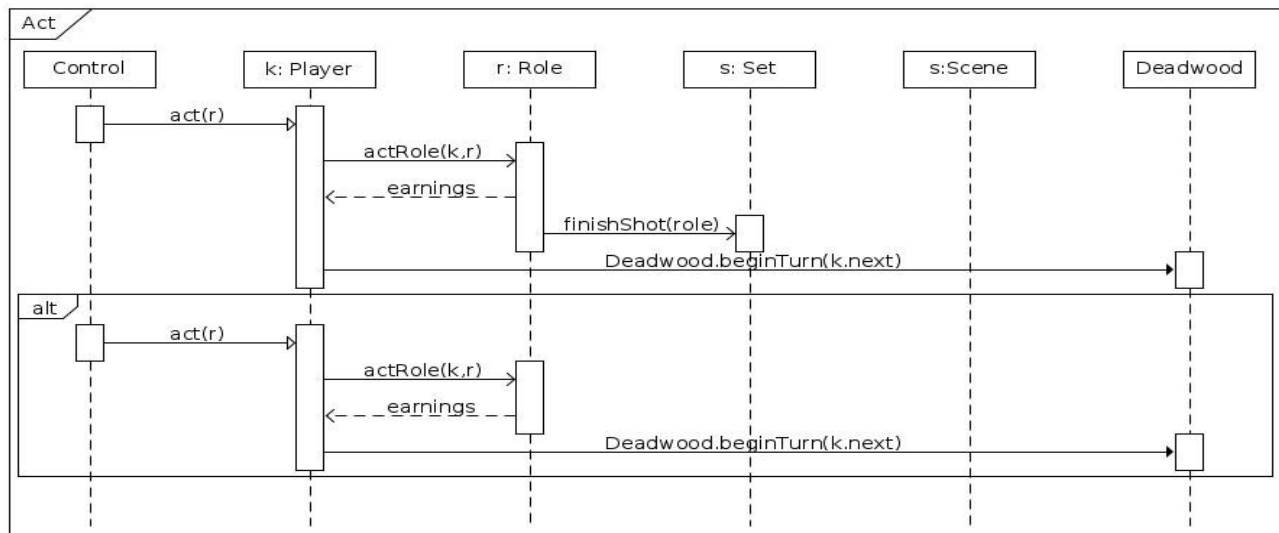
Rehearse Sequence Diagram



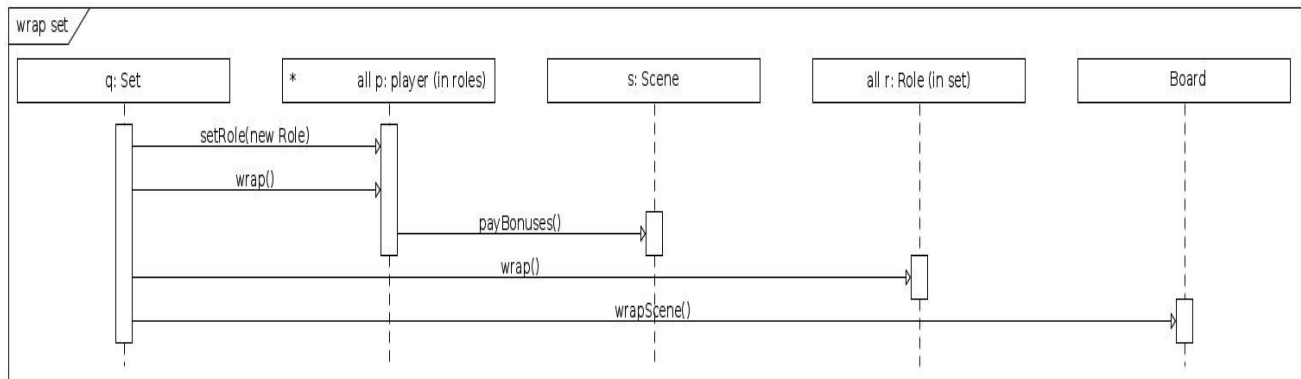
Upgrade Sequence Diagram



Act Sequence Diagram



Wrap Set Sequence Diagram



Initiate Game Sequence Diagram



End Day Sequence Diagram

