Game Design Build 3:

The design of a text adventure game is a general process that is achieved by entering data and selecting various options to create a map containing rooms, items and characters in a world that the user wishes to create. The complexity of the game is up to the game designer from a simple one room map with no items or characters to multi-room objects with many items or characters. In this document, details of the data and option selections will be described which will allow the game designer to create a non-trivial text adventure game of sufficient complexity as to make it interesting to the game player. Note this is a continuation of the build 2 description. User may refer to the document for more detail on features such as how to Save and Load a game.

GAME DESIGN BUTTONS:

Each selection requires a following selection on the room representation or outside on the green screen. The result is another dialog with the user of which sample screen shots will be given below. The buttons represented in the figure are as follows:

1. Information (follows with selection of a room); used to show room number, room name, connection item and character details
2. Add Room (follows with selection of a position inside the green window); used to add one or more rooms to the map
3. Add Connection (follows with selection of two different rooms or with itself); used to add a connection between two rooms
4. Remove (follows with selection of a room); used to remove a room and its associated connection if any from the map
5. Add Item (follows with the selection of a room where the item will be added); used to add one or more items to a room
6. Edit Room (follows with the selection of a room to edit the item(s) in the room); used to edit one or more items in a room
7. Add Player/Edit Player (follows with the selection of a room where the player will be located); used to add one player to a room where the game will start
8. Add Character (follows with the selection of the room where the character will be located); used to add one or more characters to a room
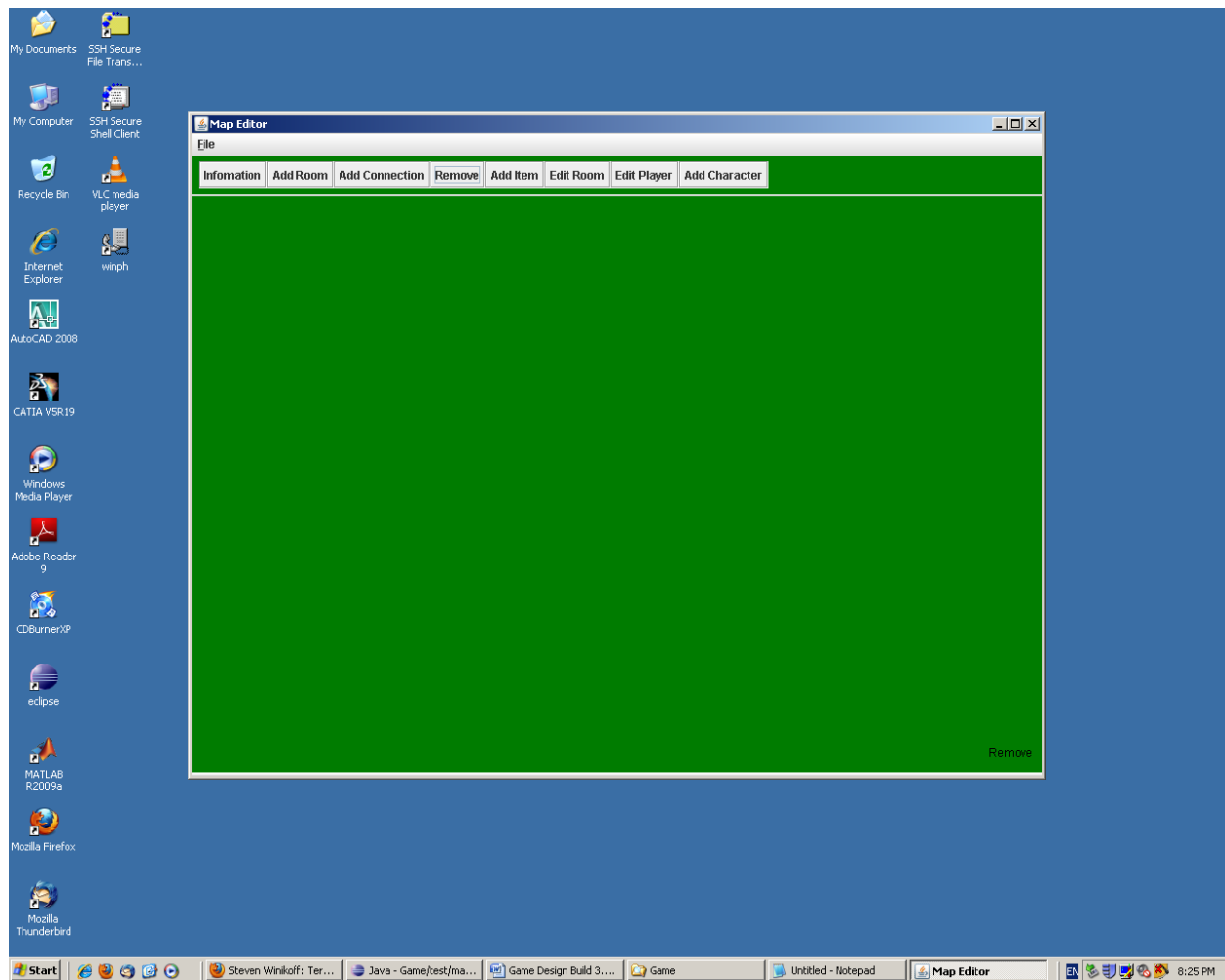
A game designer may use the following features to design a new game or modify an existing game.

ROOM:

1. The game designer can add one or more rooms to the map with the parameters:
   a. Room Name (the name of the room)
   b. Room Description (message displayed when the player enters the room)
2. The room name, room description, room items and room connections can be edited after creation. Edit of room items and room connections are the same as the explanation for creation which will follow in the next sections so it will not be repeated here.

CONNECTION:

1. The game designer can add one or more rooms to the map with the parameters:
   a. Direction (North, South, East, West, Southwest, Southeast, Up, Down)
   b. Outgoing representing the connected room(from existing list of rooms)

2. Player may move depending on conditions that the game designer may set. One or more of the following may be selected.
   a. Set the movement condition probability that the player will be able to move from room to room (a real number from 0 to 100 with 0 being the lowest and 100 the highest chances the player will advance) Note: a player may continue to try to move in that direction until this condition is satisfied.
   b. Set the movement condition for if player is carrying a specific item (enter item name)
   c. Set the movement condition for if player is not carrying a specific item (enter item name)
   d. Set the movement condition for if player has visited a specific room (enter an integer representing a room from the map created previously)
   e. Set the movement condition for if player has said the magic word to move on (enter a one word string with no spaces)
3. A door may be added to a connection to allow the game designer to lock and unlock a Door. A Item dialog will open allowing user to enter the Door with options to select:
   a. See ITEM configuration in the next section.

ITEM:
1. The game designer may add one or more items to a room with the following parameters.
   a. Name (the name of the item)
   b. Description (the message displayed to the player describing the item)
2. Option to choose if item requires a key (as in the case of a door associated with a connection between two rooms or a room item such as a box)
3. An Item may have conditions that will allow the game designer to pick up the item. One or more of the following may be selected.
   a. Set the item condition probability that the player will be able to pick up an item (a real number from 0 to 100 representing the chances an item can be selected with 0 being the lowest and 100 the highest)
   b. Set the item condition for if player is carrying a specific item (enter item name)
   c. Set the item condition for if player is not carrying a specific item (enter item name)
   d. Set the item condition for if player has visited a specific room (enter an integer representing a room from the map created previously)
   e. Set the item condition for if player has said the magic word to be able to pick up item (enter a one word string with no spaces)
4. An item may have Property(s) that may be set:
   a. Takeable (option which allows the player to take an object and put it in the player's inventory)
   b. Drinkable (a number from 0 to 100 with a Negative option representing the increase or decrease of health when the item is used)
   c. Eatable (a number from 0 to 100 with a Negative option representing the increase or decrease of health when the item is used)

d. Fireable (a number from 0 to 100 representing the decrease in health and a percentage from 0 to 100 representing the chances the attack will succeed when the item is used)

e. Throwable (a number from 0 to 100 representing the decrease in health and a percentage from 0 to 100 representing the chances the attack will succeed when the item is used)

f. Lockable (Lock /Unlock option with the selection of the item used to unlock/lock target item)

Player:

1. To add a player to a room in the map enter (select the room where player will start otherwise the saved game cannot be played)
   a. Health (a number from 0 to 100 representing the health of the player)
   b. Score (a number from 0 to 100 representing the game score in which every command entered represents one turn that is a score of plus one added)
   c. Inventory (a list of items the player is carrying)
   d. Damage (a number from 0 to 100 representing the damage caused in a hand to hand attack, that is an attack with no weapons i.e. not using throw or fire item)
   e. Current Location (a room in the map representing the location of the player)

Character:

1. To add a character(s) to a room enter:
   a. Name (the name of the character)
   b. Description (a short description describing the character)
   c. Health (a number representing the health of the character)
   d. Damage (a number representing the damage to the player when the character attacks)
   e. Message (the message to display when player enters the room)
   f. Attack Message (the message to display after an attack)
   g. Attack Probability (a real number between 0 to 1 representing the chances the character will attack the player with 0 being the lowest and 1 the highest)
   h. Room (an existing room where the character will initially be located)

SCREEN SHOTS: Sample dialogs for user data and selection input.

Any of the conditions or parameters specified above can be seen in the screen shots below where the user may enter or select the required information.
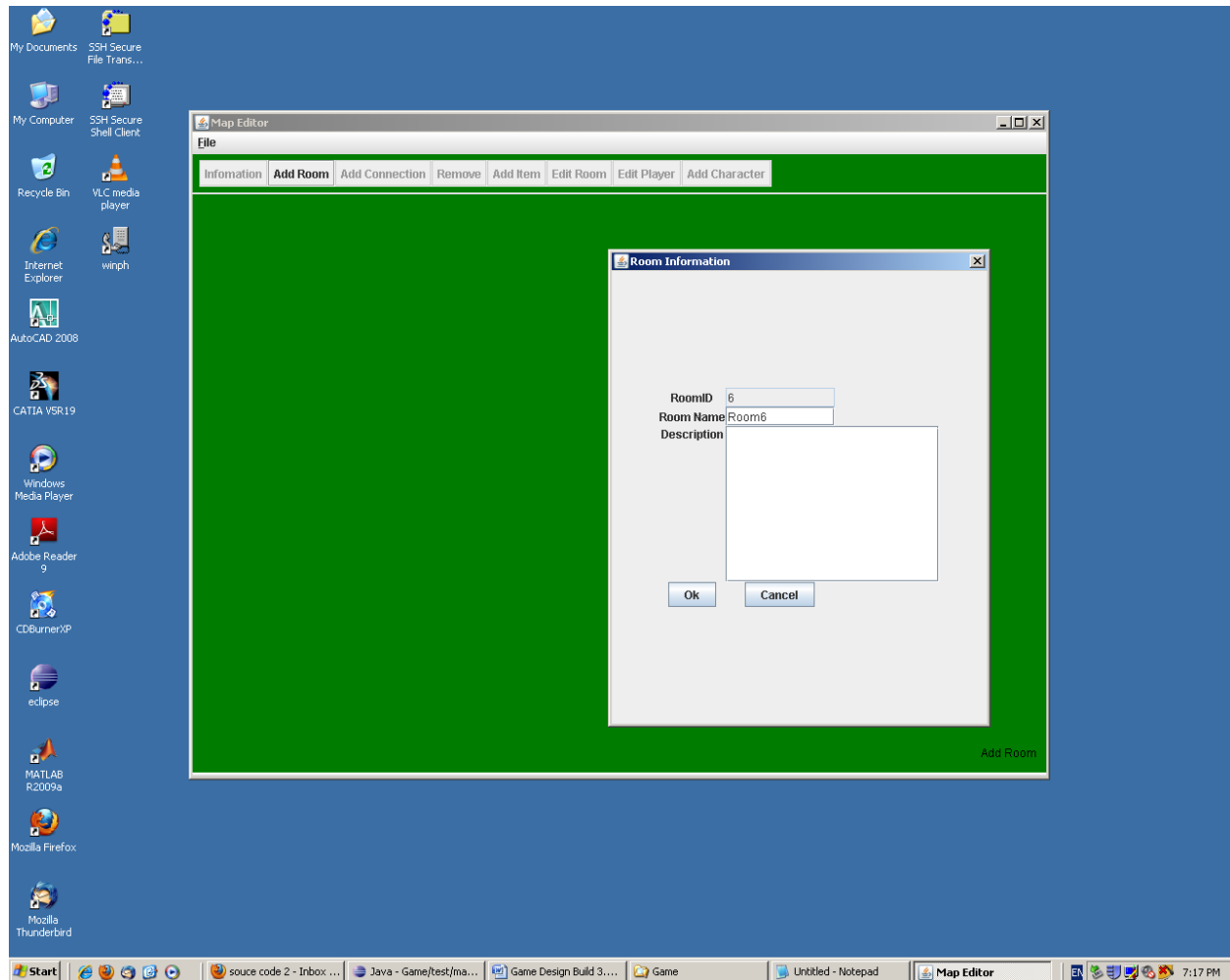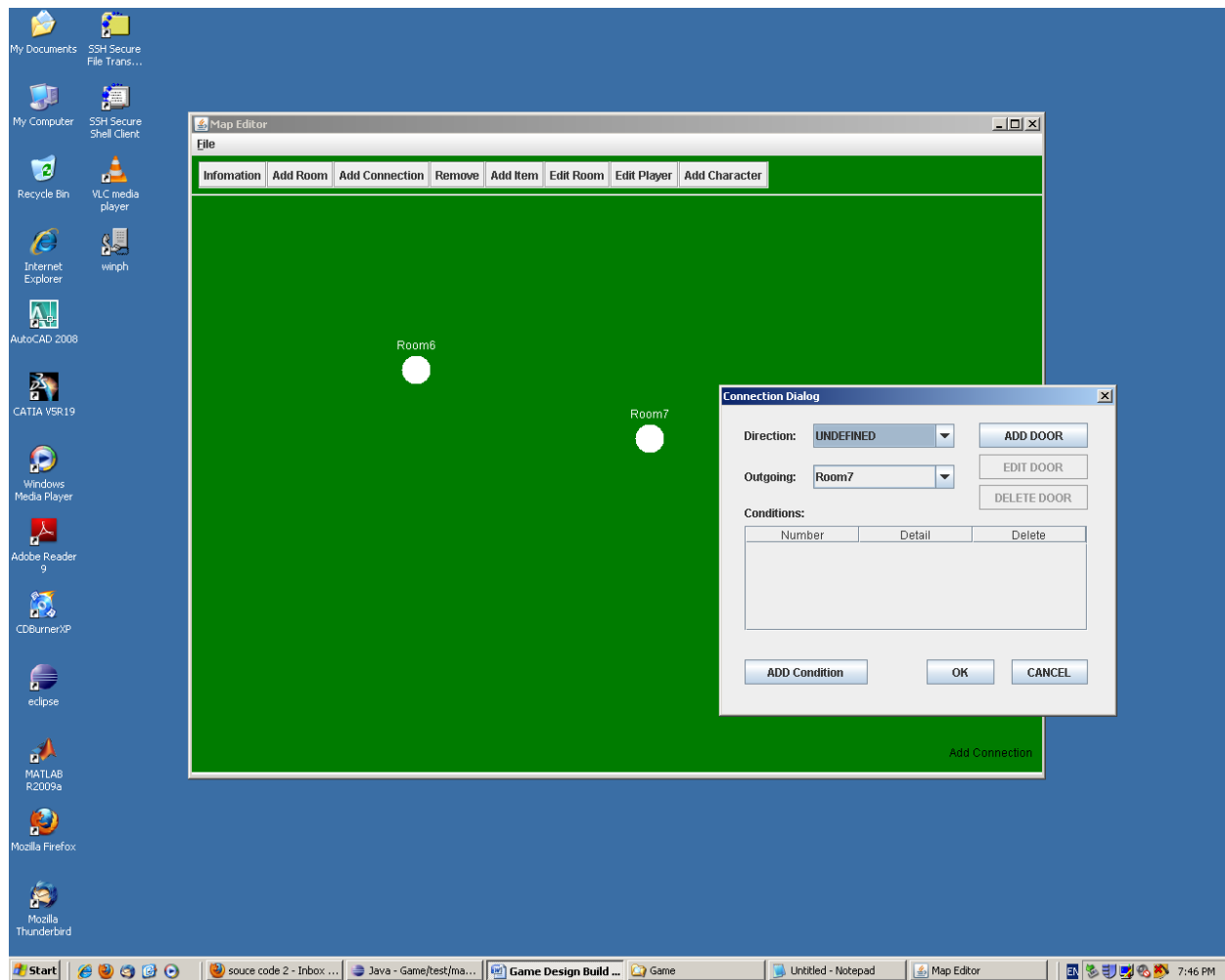

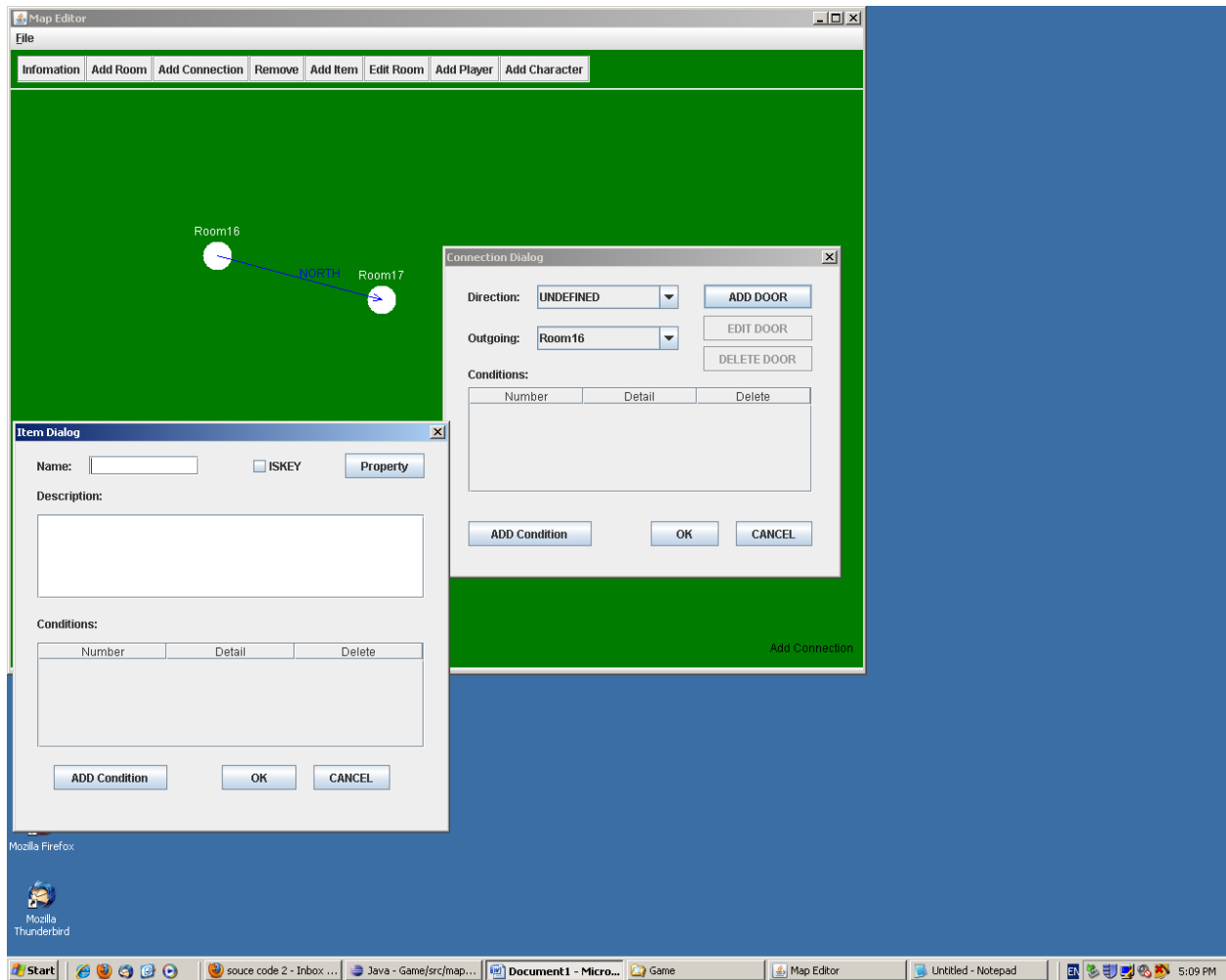**Figure 2 Add Room dialog**

Figure 3 Add Connection dialog
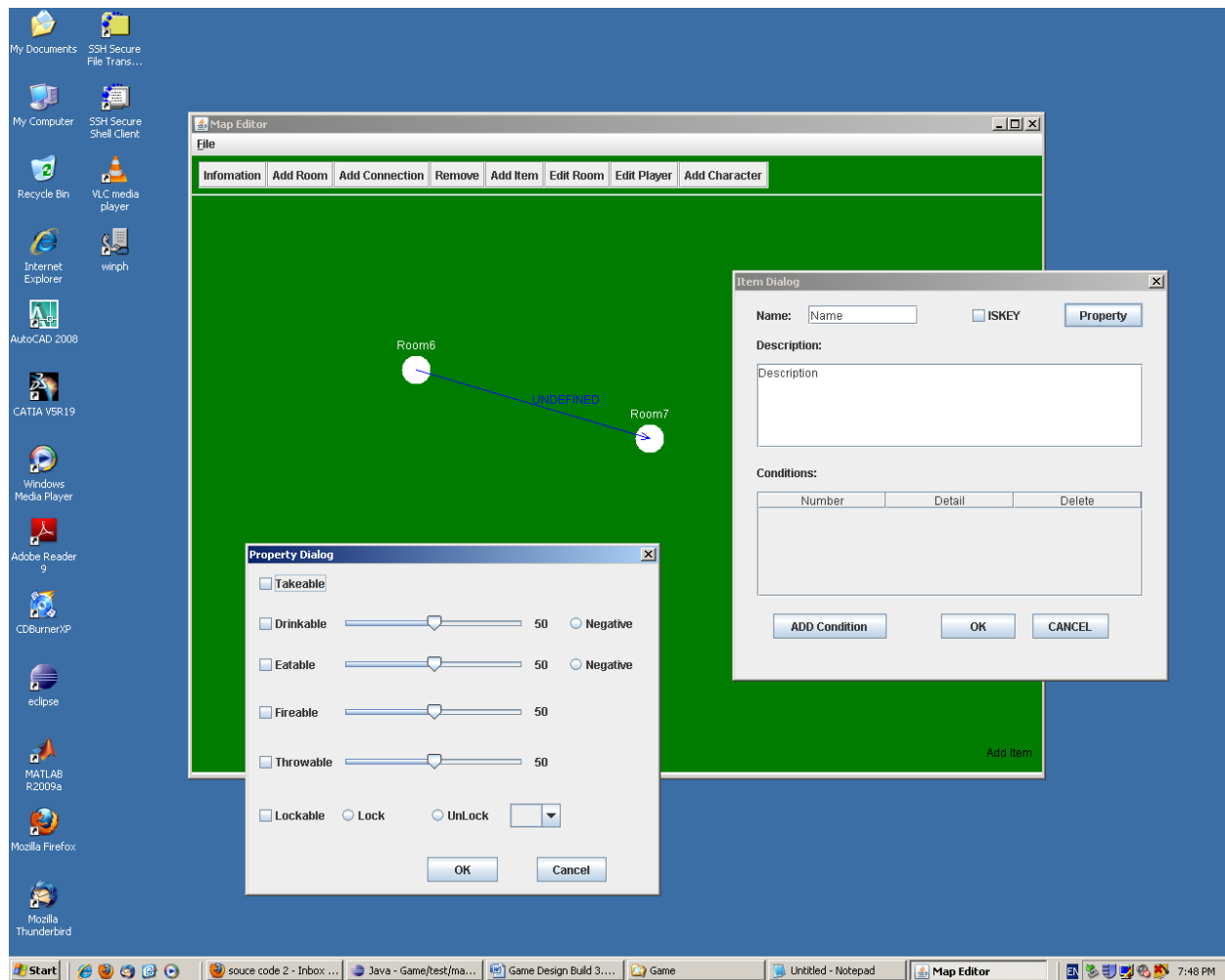
Figure 4 Add Connection with option to Add Door dialog

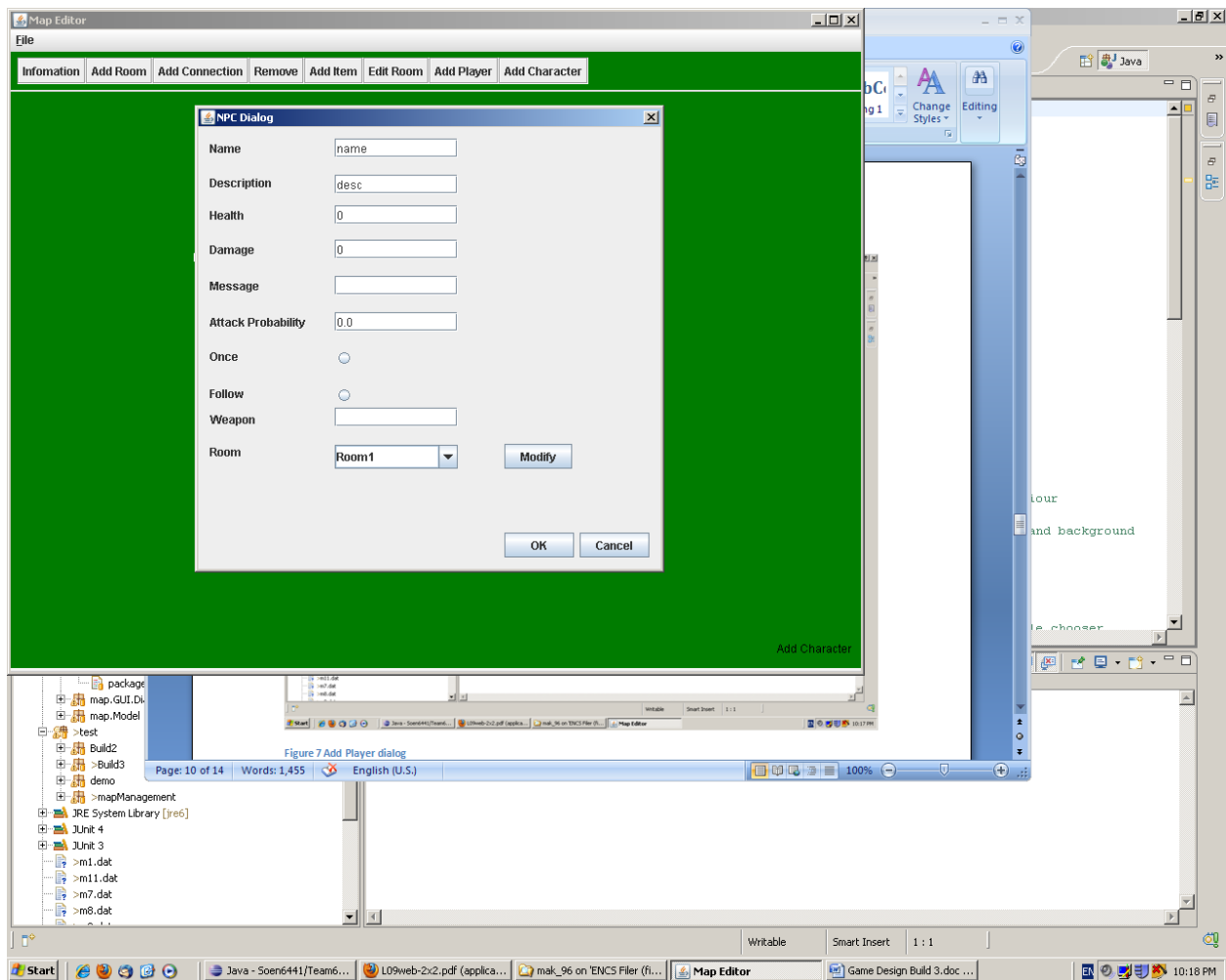**Figure 5 Add Item with option to make it Lockable with a specific item dialog**
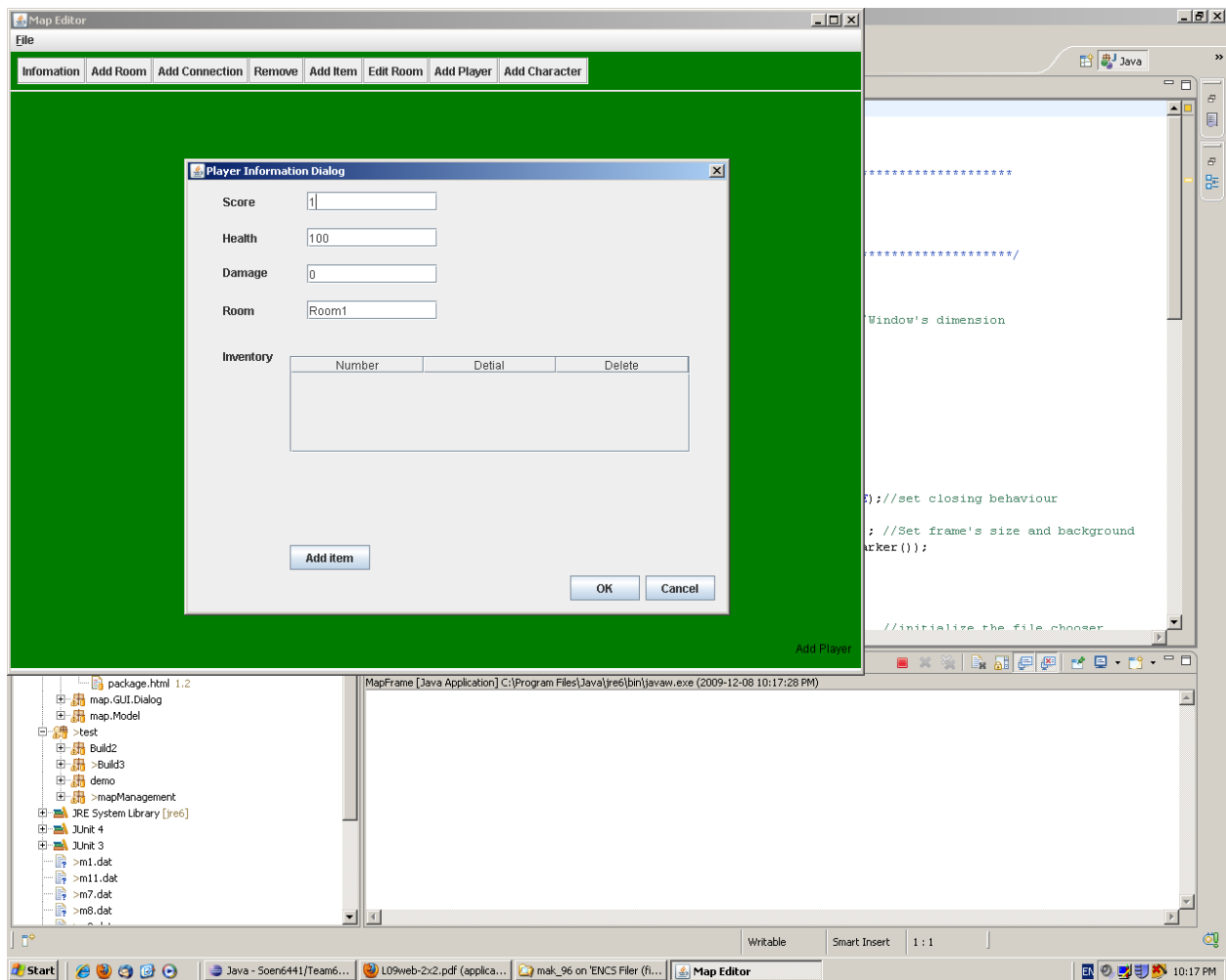
Figure 6 Add Character dialog

Figure 7 Add Player dialog
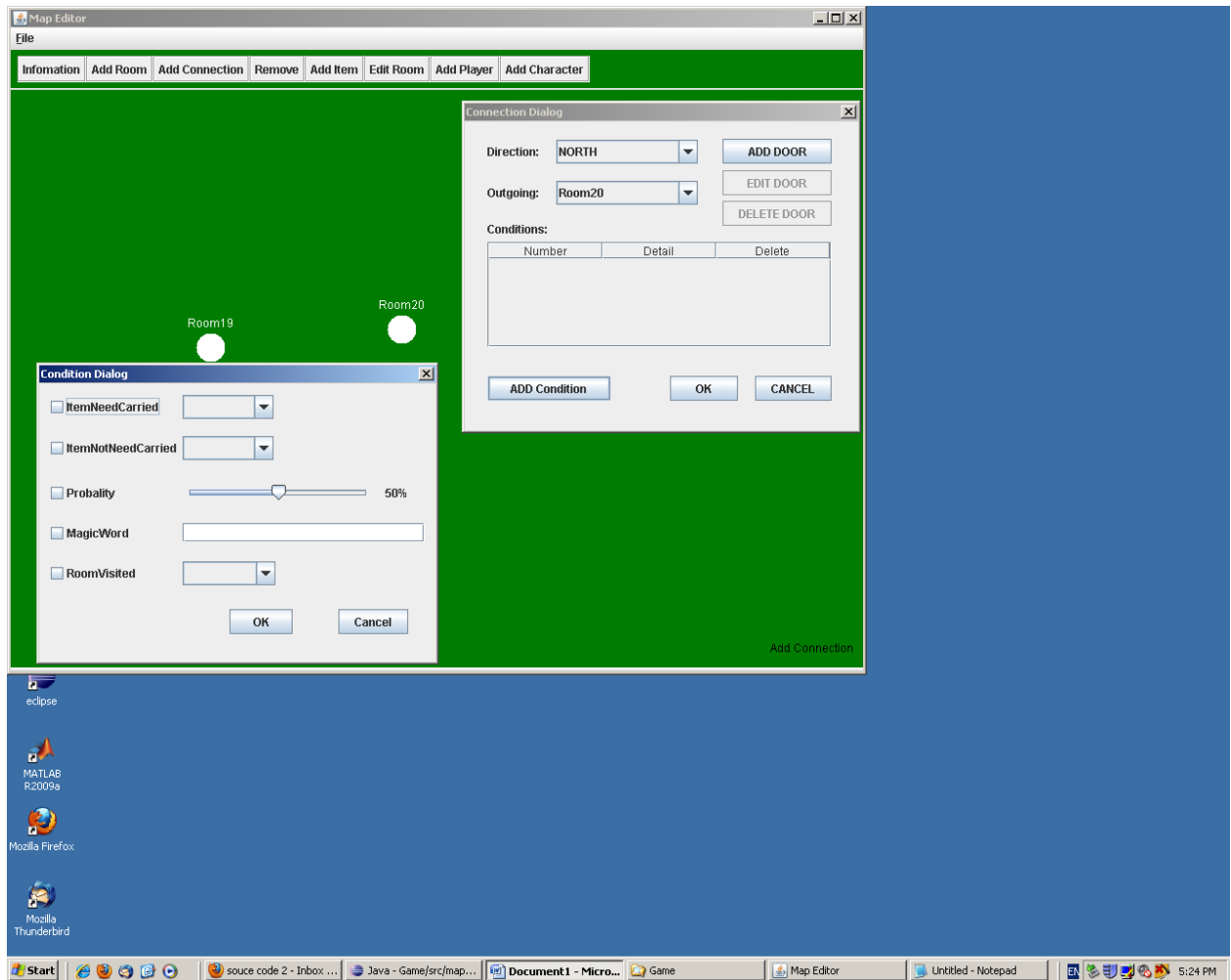
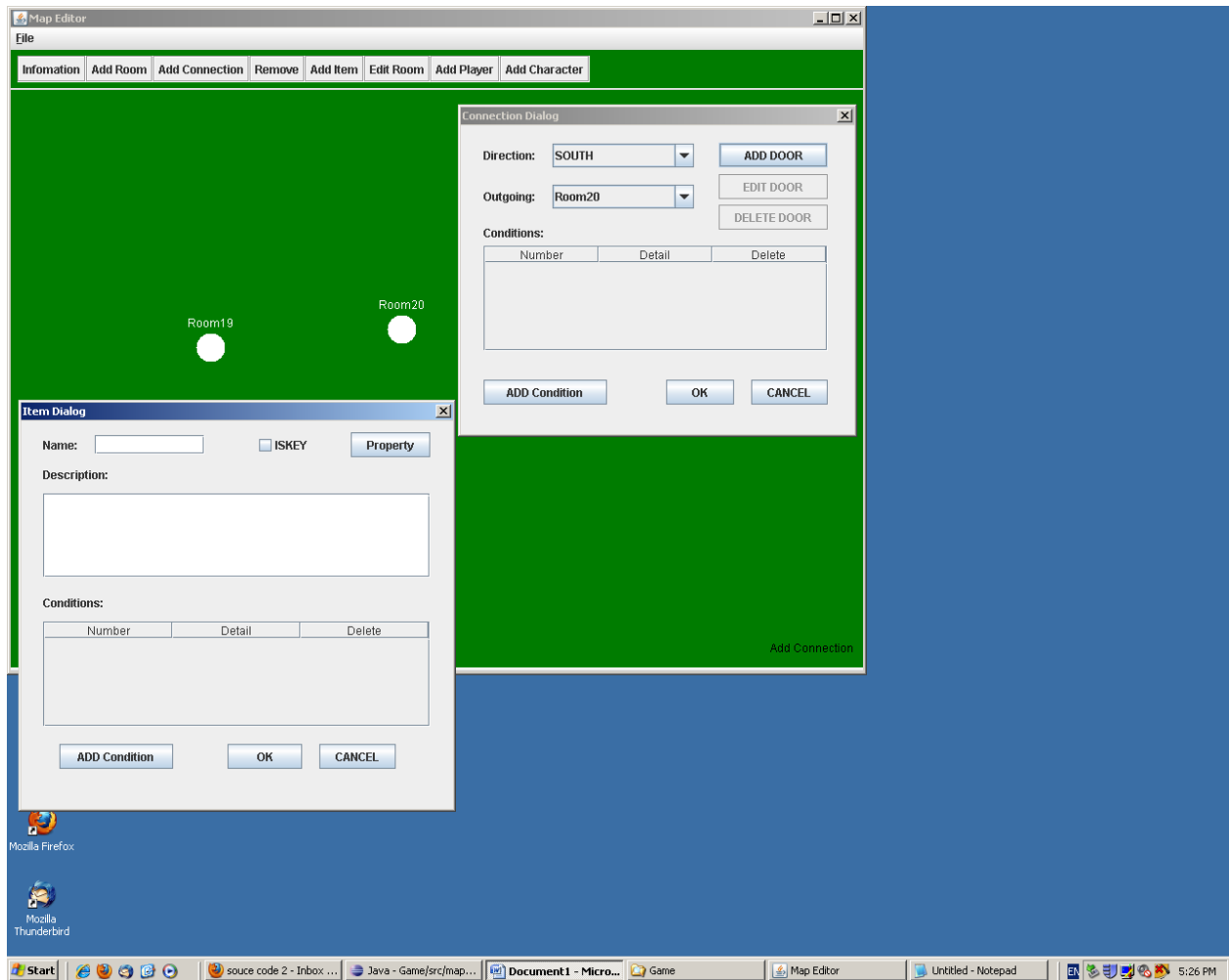**Figure 8 Add Connection with Conditions dialog**
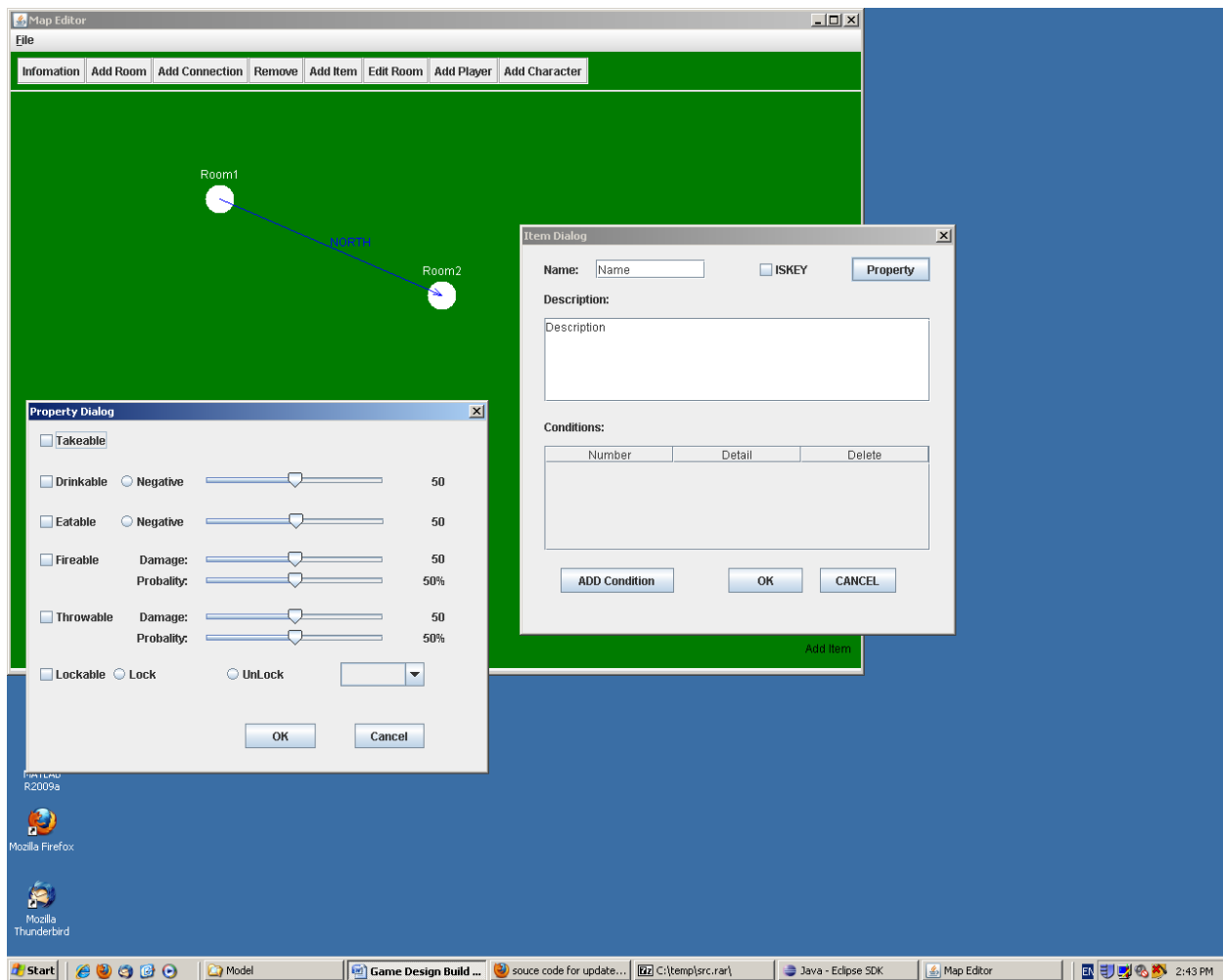
Figure 9 Add Connection with Add Door Item dialog

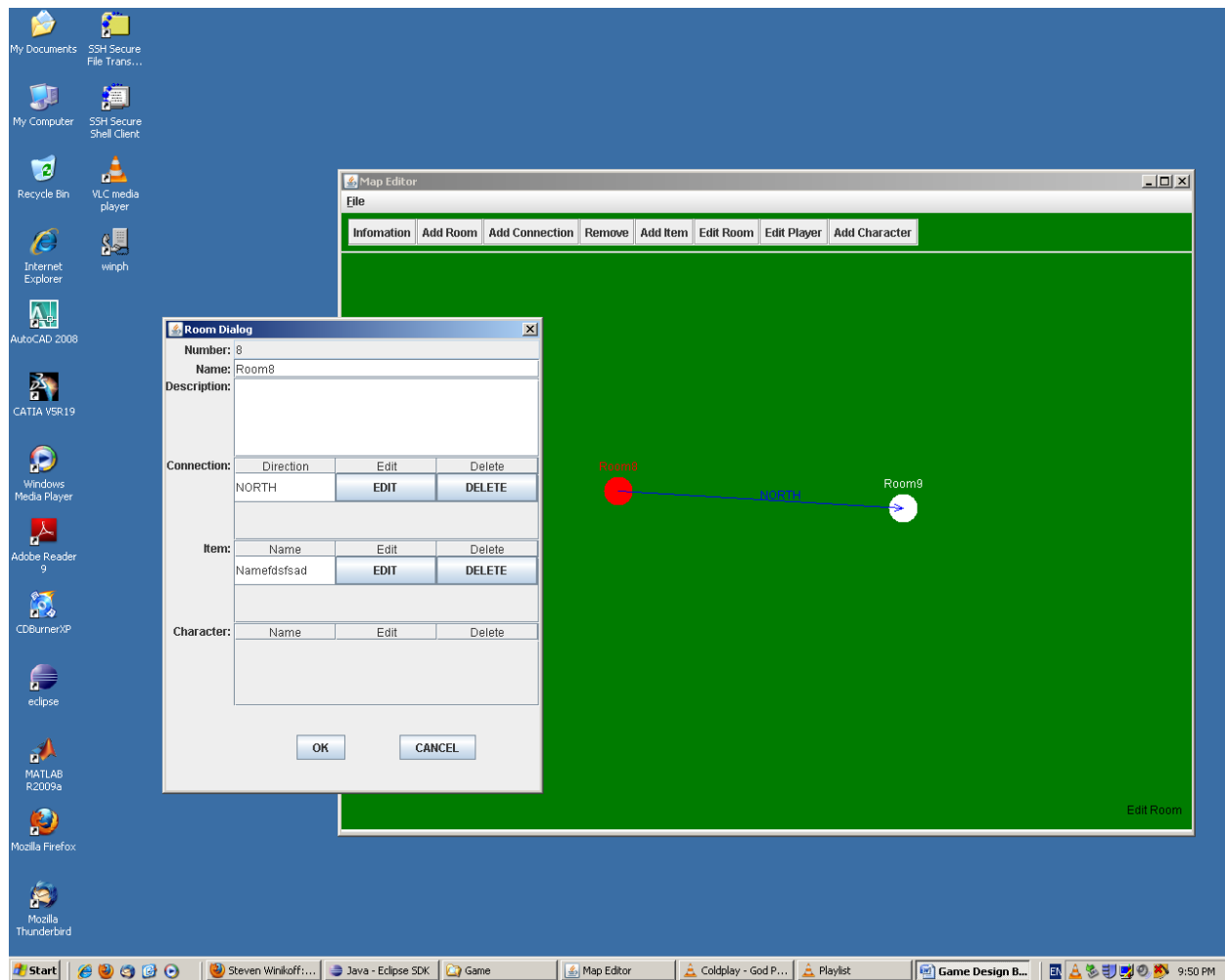Figure 10 Add Item with option to make the item Takable, Drinkable, Eatable, Fireable, Throwable or Lockable dialog

Figure 11 Edit room dialog