# CMPUT 299, Fall 2005

## Lab Exam

You have been hired by the Thieves Guild to create a magical setup for smuggling. They want items smuggled across the city so that even if the smuggler is caught, the Thieves Guild cannot be implicated. You will implement this with several magical chests.

During the midterm your regular drive partition should be replaced with a special partition for turning in the midterm. Save any requested files onto this partition. If there is any question of whether the midterm is saved properly, we can copy your files onto a USB key as well.

After completing the midterm, fill out a mid-term course evaluation and check with the instructor to be sure that your exam has been properly received.

*Test-taking suggestions*: When taking the exam, build and test the world in small increments. When multiple conditions are needed for an action, incrementally add the conditions instead of adding them all in one step. Simple scripting mistakes can be time-consuming to debug. If you believe you have scripted an object correctly, but it isnt behaving correctly, do not spend all your time debugging. Instead finish the exam and then do the debugging after youve finished the major portions of the exam. Also, note that we are not too worried about the appearance of custom items. Make sure all the scripts work, and then if you have time, you make the appearance of your items more realistic.

## 1 Build A World

[10 Marks] Create a new world with two areas. The first area is the Thieves Guild. The second area is the outside city.

#### **1.1 Build the City**

[10 Marks] In a long dark alley there should be the first of two chests, the *Pick-Up Chest*. The *Pick-Up Chest* should contain *smuggled* goods. The second chest, the *Drop-Off Chest*, will be outside the Thieves Guild. Inside the thieves guild place a single non-player character (NPS), the Master Thief.

# 2 Scripting the World

### 2.1 Getting Started

[10 Marks] The *Pick-Up Chest* should be locked. If you go into the Thieves Guild and talk to the Master Thief, he should offer your player character (PC) a job ferrying

items between the *Pick-Up Chest* and the *Drop-Off Chest*. If/when the PC accepts, the Master Thief will give your PC the key to the *Pick-Up Chest*.

When you drop any item into the Drop-Off Chest, four things should happen:

[10 Marks] There should be a visual effect showing that something has been placed in the chest.

[10 Marks] The item you dropped into the chest should disappear.

[10 Marks] More smuggled goods should be placed in the Pick-Up Chest.

[9 Marks] You should be given 100GP.

[1 Mark] Copy your module onto the network drive. Rename the file "*login*-part1.mod" where *login* is your 299 account name.

#### 2.2 Monitoring the Process

You may have noticed that you can drop worthless items into the *Drop-Off Chest* and you will get paid for them. For instance, you could drop one gold at a time into the chest and quickly multiple your treasure. We want to change this behavior.

[10 Marks] Change the scripts so that you don't get paid for items other than smuggled goods dropped into the *Drop-Off Chest*. (Items should still disappear.)

[10 Marks] Use plot tokens to "mark" anybody who drops non-smuggled goods into the *Drop-Off Chest* and display a message warning the player not cheat the Thieves Guild.

[9 Marks] The thieves want anyone who cheats them to be punished. But, not in the open where anybody could see. So, add a script to the *Pick-Up Chest* so that if you try to take items from the *Pick-Up Chest* after putting invalid items into the *Drop-Off Chest*, you will take 200 hit points damage.

[1 Mark] Copy your module onto the network drive. Rename the file "*login*-part2.mod" where *login* is your 299 account name.