

Spike: 11**Title:** Messaging**Author:** Michael Williams, 7668481**Goals / deliverables:**

- Code
- To expand the simple messaging system to support announcements and blackboards.
- To avoid refactoring old code as much as possible to support the new classes.
- Messaging Specification (Announcement and Blackboard aspect)

Technologies, Tools, and Resources used:

- Visual Studio IDE

Tasks undertaken:

- Decide on the specifications for the additional functions.
- Implement the functionality.
- Test the functionality.

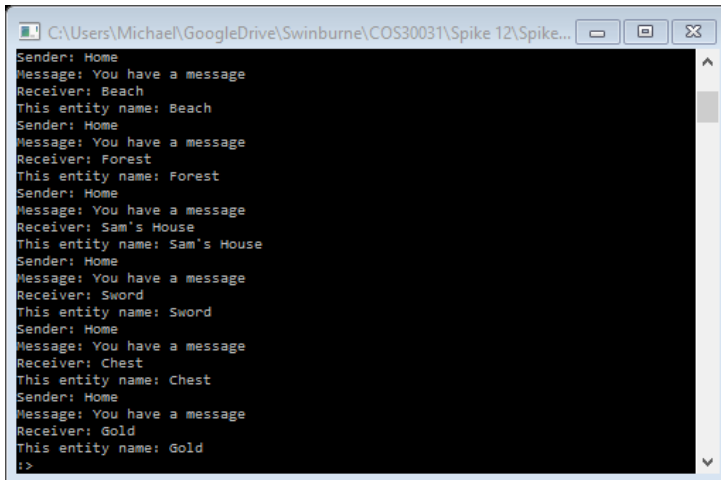
What we found out:

We found out how simple it is to expand the messaging system to support announcements and blackboards. We decided on a very simple structure in order to give rise to the additional functionality. When an announcement happens, it is received by everyone, even the sender. It is then up to the recipient to determine if the message is for them, if it is, what should they do with it. In order to achieve this, we added a simple case where the recipient IS the sender.

In order to support the blackboard aspect, each Messageable object now has some additional functions. This allows them to decide if they want to receive messages and also a function to check the blackboard. When there is a message on the blackboard waiting for an object, the object gets a counter incremented so it knows how many messages it has pending.

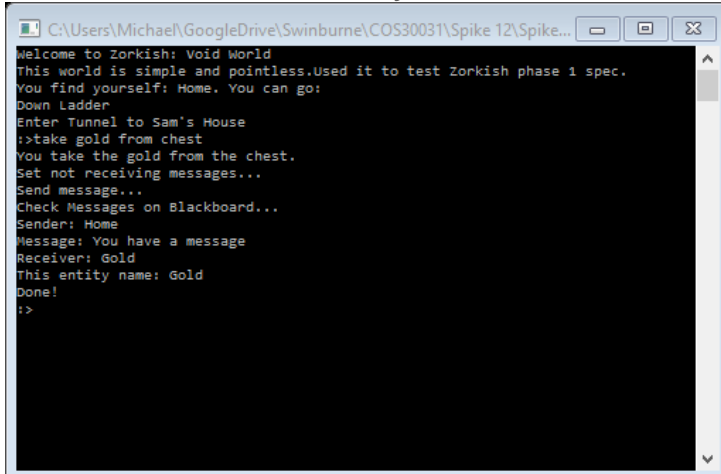
Please see screenshots below:

Announcements



```
C:\Users\Michael\GoogleDrive\Swinnburne\COS30031\Spike 12\Spike...
Sender: Home
Message: You have a message
Receiver: Beach
This entity name: Beach
Sender: Home
Message: You have a message
Receiver: Forest
This entity name: Forest
Sender: Home
Message: You have a message
Receiver: Sam's House
This entity name: Sam's House
Sender: Home
Message: You have a message
Receiver: Sword
This entity name: Sword
Sender: Home
Message: You have a message
Receiver: Chest
This entity name: Chest
Sender: Home
Message: You have a message
Receiver: Gold
This entity name: Gold
:>
```

Blackboard Functionality



```
C:\Users\Michael\GoogleDrive\Swinnburne\COS30031\Spike 12\Spike...
Welcome to Zorkish: Void world
This world is simple and pointless.Used it to test Zorkish phase 1 spec.
You find yourself: Home. You can go:
Down Ladder
Enter Tunnel to Sam's House
:>take gold from chest
You take the gold from the chest.
Set not receiving messages...
Send message...
Check Messages on Blackboard...
Sender: Home
Message: You have a message
Receiver: Gold
This entity name: Gold
Done!
:>
```