

National University of Singapore
School of Computing
CS1101S: Programming Methodology
Semester I, 2013/2014
Mission Sidequest 4-1
Defend Yourself

Start date: 27 August 2012

Due: 02 September 2012, 23:59

Readings:

- Textbook Sections 1.1.1 to 1.1.4

Against enemies well versed in the Force, a weak mind often means a quick defeat. The basic mind training you were exposed to in Mission 4, in dealing with higher-order functions, thus goes a long way in your personal defense.

In this side quest, we invite you to understand the curve in greater detail. Completing this quest would signify your understanding of the method, and would gain you the “Impenetrable Mind” achievement.

This side quest consists of only **one** task.

Task 1:

Since you are a student of the JFDI academy, you should be able to carve out “JFDI” with what you learned in Mission 4. For simplicity however, it shall suffice for you to write the letter “J”. Can you do it?

To be specific, your task is to define the curve J that lies entirely within the rectangular region bounded by the vertices $(0,0)$, $(1,0)$, $(1,1)$, $(0,1)$, which is the region displayed in the viewport. When we run

```
(draw_connected(1000))(J);
```

a figure “J” should be traced out on the viewport. An example is shown in Figure 1.

Task Files

- lib/list.js
- lib/misc.js
- lib/graphics.js
- lib/hi_graph.js
- sidequest_4-1_1.html
- **sidequest_4-1_1.js**

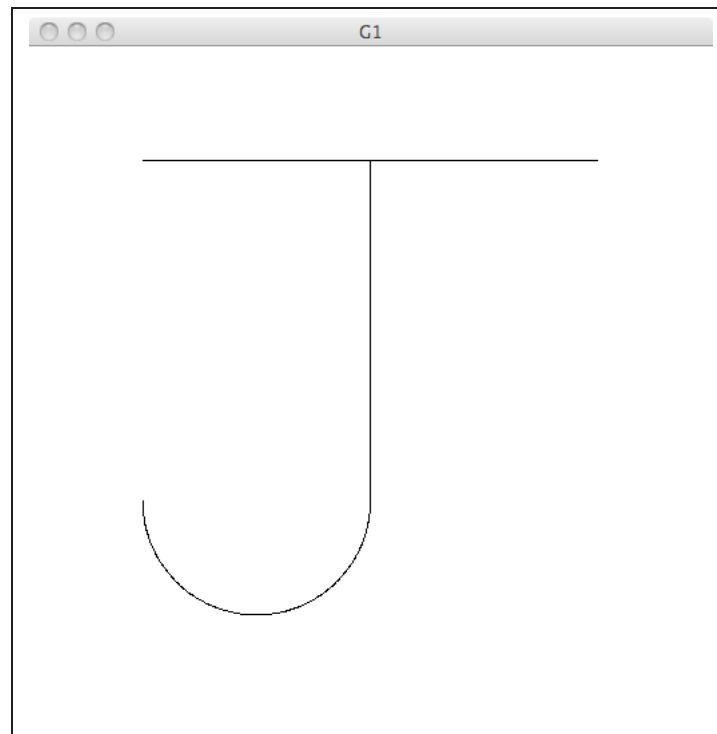


Figure 1: `(draw_connected(1000))(J);`

Submission

To submit your work to the Academy, copy the contents from the template file(s) into the box that says "Your submission" on the mission page, click "Save Code", then click "Finalize Submission". Note that submission is final and that any mistakes in submission requires extra effort from a tutor or the lecturer himself to fix.