16.35 PSet #1

Ryan Fish

February 9, 2015

Pre-deliverables

1 Real-time Systems and Software

- Learn the language of software requirements so I can communicate them to a design team, and interpret needs from conversations with customers.

- Be exposed to common errors made in this field so I may learn by example rather than experience. Life-critical systems aren't a good place for learning by experience.

- Practice building real-time software and systems to prepare for a hopeful career in embedded mechanical control systems.

2 Documentation

2.1 Java version on Athena

1. 1.7.0_65

2. ran `java -version` on an athena remote session

3. Googled `check java version linux` and logged in to athena remotely, maybe 45 seconds all told

2.2 Enable assertions

1. Assertions in the program are enabled by running java with the `-ea` flag

2. http://docs.oracle.com/javase/8/docs/technotes/guides/language/assert.html#enable-disable

3. 20 seconds via Google

2.3 Double to string

1. `String doub = Double.toString(num)` where `num` is the input double and `doub` is the output String

2. http://docs.oracle.com/javase/7/docs/api/java/lang/Double.html

3. found via google, 2 minutes to verify it produces the expected output

2.4 Create jar with files from dir `asst1`

1. `jar cf asst1.jar asst1`

2. http://docs.oracle.com/javase/tutorial/deployment/jar/build.html

3. 20 seconds via Google

6 Code control

6.1 Subversion Log

1. ```
$ git commit -am "oops, now I have read section 6, and rearranged files properly"
[master 6064bee] oops, now I have read section 6, and rearranged files properly
11 files changed, 249 insertions(+), 14 deletions(-)
rename asst1/{src => }/Control.java (100%)
rename asst1/{src => }/GroundVehicle.java (100%)
rename asst1/{src => }/Simulator.java (100%)
rename asst1/{src => }/util.java (100%)
```

2. maybe 6 hours on the code and 30 seconds on the file copying and committing.