EECS3311 Fall 2019
Labs 3 & 4, Project
Required Pre-Study Materials
Using ETF (the Eiffel Testing Framework)

Jackie Wang

Recommended Due Date for Sections A & E: Friday, October 18

1 Required Tutorials

1. **Tutorial Videos on ETF**
   - Before starting the above tutorial videos, set up a starter project as follows.
   - Once you login into your Prism account, follow the steps below to get settled for the tutorial videos:

   1.1 Type the following commands to create a new subdirectory `ETF/bank` in your workspace (assuming that a directory `eecs3311-workspace` is on your Desktop):

   ```
   cd ~/Desktop/eecs3311-workspace
   mkdir ETF
   mkdir ETF/bank
   ```

   1.2 Inside the subdirectory `bank`, create a plain text file `bank-events.txt`:

   ```
   -- declaration of system name
   system bank

   -- declaration of event signatures

   new(id: STRING)
           -- create a new bank account for "id"
   deposit(id: STRING; amount: INTEGER)
           -- deposit "amount" into the account of "id"
   withdraw(id: STRING; amount: INTEGER)
           -- withdraw "amount" from the account of "id"
   transfer(id1: STRING; id2: STRING; amount: INTEGER)
           -- transfer "amount" from the account of "id1" to that of "id2"
   ```

   1.3 Run the following command from your Prism account:
   Noice that we do not distribute executables of the `etf` tool (for generating a starter project). You can get access to the ETF generator via your Prism account.

   ```
   cd ~/Desktop/eecs3311-workspace/ETF/bank
   etf -new bank-events.txt .
   ```

1.4 A list of files should be automatically generated.

1.5 If you decide to work through the tutorial videos on your Prism account, you may now get started.

1.6 if you decide to work on you own computer:

- Compress the generated starter project and transfer the zip file to your own computer:

```
cd ~/Desktop/eecs3311-workspace/ETF
zip -r bank.zip bank
```

- Proceed to Section 2 to set up the mathmodels library, which is required for compiling the generated ETF starter project.

2. Link to a Written Tutorial: **Tutorial on ETF: a Bank Application**

2 Working from Home

– To generate the ETF project, you must use the `etf` command that is available on your Prism account.

– For a generated ETF project to compile on your machine, you need to first download a library called `MATHMODELS`, and then set a environment variable `MATHMODELS` which points to the location of its download. See your Lab0 instructions for details.