CS212: Paradigms
Dr. Gross, Spring 2016

Homework 2 - Inch by Inch, Row by Row

If you don't have 3, count 'em, 3 separate NetBeans projects, each with a separate repository (lecture, lab, personal), go to those instructions first. They're in email.

You'll need to know four commands on git:

1. Adding a new file to the local repository (do this for each file):
   Team->Add
2. Committing a change to the local repository:
   Team->Commit...
3. Push the changes from the local repository to the remote repository:
   Team->Remote->Push to Upstream
4. Pull changes from the remote repository to your local copy (if you change the code on one machine and go to another):
   Team->Remote->Pull from Upstream

I promise that as you use git, it will get easier! Remember when you knew nothing about NetBeans.

We're going to plant a virtual garden! Gardens let you grow plants from seedlings. Those seedlings become full-fledged plants at 5 days. You are not a very good gardener because you can only do one thing per day. After 30 days, you can pick the fruit, and the plant grows a new fruit.

```
Welcome to Gardener 3000!
Day 1: What would you like to do?
   1. See garden
   2. Plant seedlings
1
You have nothing in your garden.

Day 2: What would you like to do?
   1. See garden
   2. Plant seedlings
2
Choose a seedling to plant:
   1. Tomato
   2. Pineapple
   3. Raspberry
   4. Cucumber
3
You have planted 1 raspberry seedling.

Day 3: What would you like to do?
   1. See garden
   2. Plant seedlings
1
Your garden has:
```

```
1 raspberry seedling that is 1 day old

…

Day 30: What would you like to do?
   1. See garden
   2. Plant seedlings
1
Your garden has:
1 raspberry plant that is 28 days old
1 pineapple seedling that is 10 days old
1 pineapple seedling that is 2 days old

...

Day 55: What would you like to do?
   1. See garden
   2. Plant seedlings
   3. Pick fruit
3
Which plant do you want to pick?
   1. Raspberry
   2. Pineapple
You picked a pineapple!

Day 56: What would you like to do?
   1. See garden
   2. Plant seedlings
   3. Pick fruit
   4. See basket
3
Your garden has:
1 raspberry plant that is 55 days old
1 pineapple plant that is 1 day old
1 pineapple plant that is 28 days old

Day 57: What would you like to do?
   1. See garden
   2. Plant seedlings
   3. Pick fruit
   4. See basket
4
Your basket contains:
1 pineapple
...
```

Some rules and notes:

1. As always, start
2. A class diagram is due Monday 9am (20% of grade). It should show your classes, their methods and attributes, their constructors, and the connections between classes. Name is lastname-garden-design.uml. Please arrange diagrams neatly. Put it in your documents folder in your repository, add, commit, and push.

3. You will need at least five classes, one of which will be Menu, to manage input and output
4. In your private repository and in the directory labeled firstname.lastname, create a new package called:
   `edu.blackburn.cs.cs212sp16.lastname.garden`
5. Other than your main method, you won't use the keyword static. Static is basically saying "I don't want to use objects".
6. Homework is due Thursday before lab. Check on github's website to verify that your files are uploaded and up to date (until you really know how to use the tool).
7. Yes, this is essentially Farmville, but I had the idea first, dammit.

Remember to:
- Team->Add
  Whenever you create a file, **add** it right away
- Team->Commit
  Commit every 15 minutes or so, or when you solve something, or if you are about to change something
- Team->Remote->Push to Upstream
  Push every time you stop coding, or you want to move from one machine to another
- Team->Remote->Pull from Upstream
  If you programmed on one machine and pushed, you'll need to **pull** when you go to another machine (unless you are doing everything on a thumb drive)

Grading Rubric

Part	Points
Coding standards and comments	10
Time estimate and final accounting	5
Getting the repository, using it, and pushing final code that compiles	25
Design complete	10
Design coherent	5
Design good	5
Handle input	10
Change prompts depending on whether gardener has basket or fruit to pick	5
Manage state changes of objects	15
Print appropriate output of seedling choices, garden, and basket	10
When I say **partial**, you say **credit**. **Partial! Credit! Partial! Credit!**	