CS18010 Group Presentation

Github, Greenfoot, Greeps

Github - What is it?

- An easy to use, easy to understand group collab software
- Mainly used by developers for coding
- Stores automatic backups of work
- Even has a mobile app!

Why you'll love GitHub.

Powerful features to make software development more collaborative.



Great collaboration starts with communication.

Review changes, comment on lines of code, report issues, and plan the future of your project with discussion tools.



World's largest open source community.

Share your projects with the world, get feedback, and contribute to millions of repositories hosted on GitHub.



Friction-less development across teams.

Work with project collaborators or teams of people in organization accounts to communicate with ease.

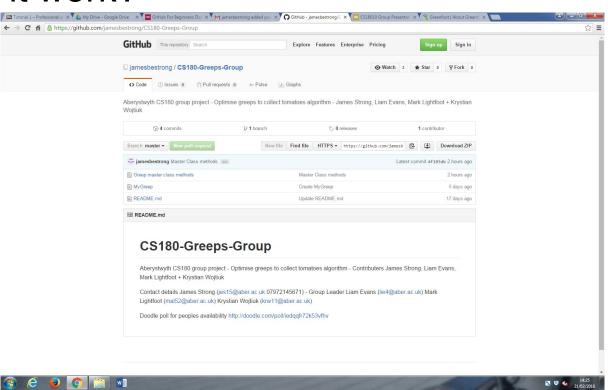


Do more with powerful integrations.

Discover applications and tools that integrate with GitHub to help you and your team build software better, together.

Github - How does it work?

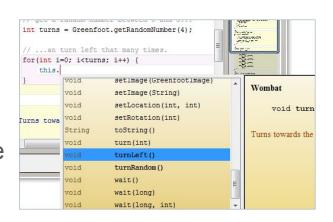
- Repositories
- Can be public or private
- Multiple developers
- Various branches
- Push and pull
- Backups
- Statistics

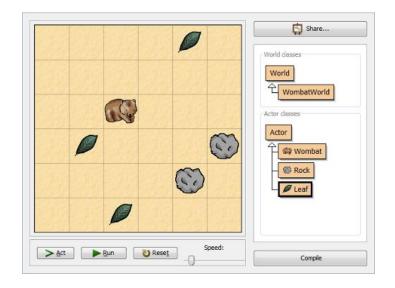


Greenfoot - What is it?

- Simple programming IDE
- Java 'teaching' program tutorials & help available
- GUI heavy
- Teacher resources
- Publish programs on greenfoot 'hub'

```
which point it turns left. This wombat can no
   * If a wombat finds a leaf, it eats it.
11
    * @author Michael Kolling
    * @version 1.0.1
  public class Wombat extends Actor
                                                      private static final int EAST = 0;
      private static final int WEST = 1;
      private static final int NORTH = 2:
      private static final int SOUTH = 3;
      private int direction:
      private int leavesEaten;
24
      private GreenfootImage wombatRight;
       private GreenfootImage wombatLeft;
```





Greeps

- Program involving two teams
- 'Greeps' face each other to collect to the most tomatoes
- Involves random algorithms
- Set of rules to follow

```
* Rules:
* Rule 1
* Only change the class 'MyGreep'. No other classes may be modified or created.
* Rule 2
* You cannot extend the Greeps' memory. That is: you are not allowed to add
* fields (other than final fields) to the class. Some general purpose memory is
* provided. (The ship can also store data.)
* Rule 3
* You can call any method defined in the "Greep" superclass, except act().
* Rule 4
* Greeps have natural GPS sensitivity. You can call getX()/getY() on any object
* and get/setRotation() on yourself any time. Friendly greeps can communicate.
* You can call getMemory() and getFlag() on another greep to ask what they know.
* Rule 5
* No creation of objects. You are not allowed to create any scenario objects
* (instances of user-defined classes, such as MvGreep). Greeps have no magic
* powers - they cannot create things out of nothing.
* Rule 6
* You are not allowed to call any methods (other than those listed in Rule 4)
* of any other class in this scenario (including Actor and World).
```

Greeps - Our Experience

Modifications made:

- Made the greeps 'talk' to each other
- Improved/created the 'homing' mechanism
- Generally made the greeps better at finding tomatoes and attacking enemies

Experiences/issues:

- Throws errors depending on the programs mood that day
- Doesn't like much, at all
- Our greeps were awful at the start, however improved significantly

Demo

Group experience

- A new experience for most of us
- Sorting out meeting times wasn't too difficult thanks to 'doodle'
- Github made everyone's life easy
- Split everything up into manageable chunks

Overall:

- Enjoyable (apart from greenfoot)
- Met new people
- Improved coding & logic skills
- Improved teamworking, communication & time management skills