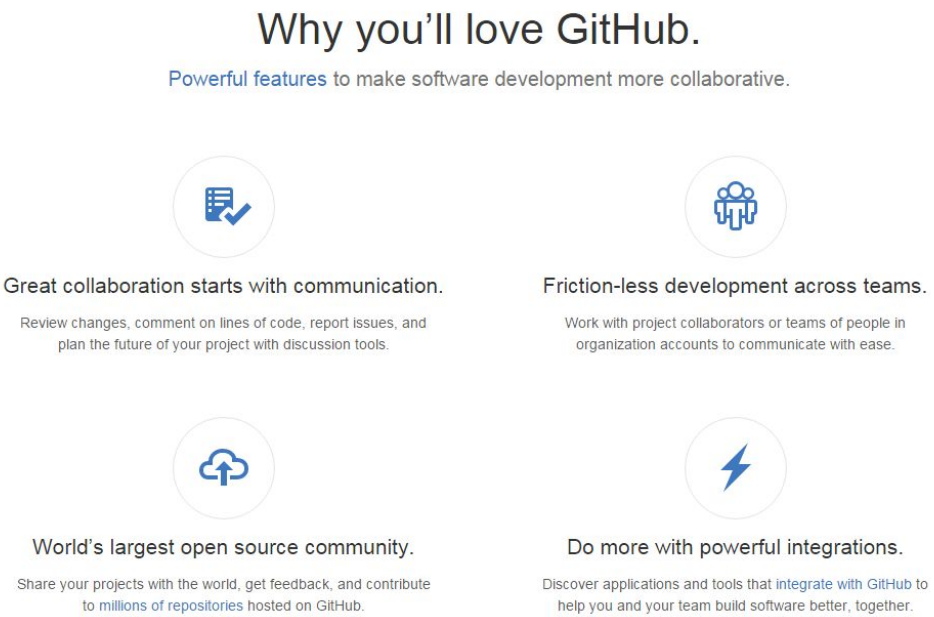
CS18010 Group Presentation

Github, Greenfoot, Greeps

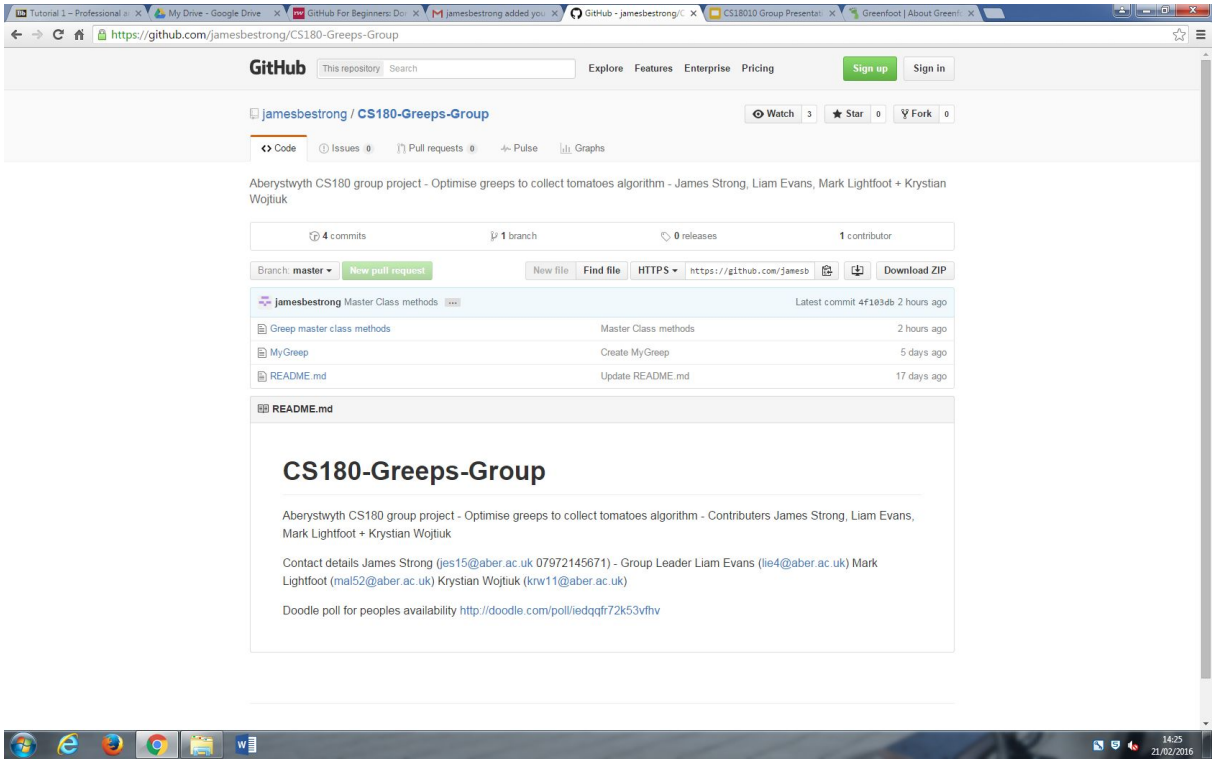
Github - What is it?

- 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!



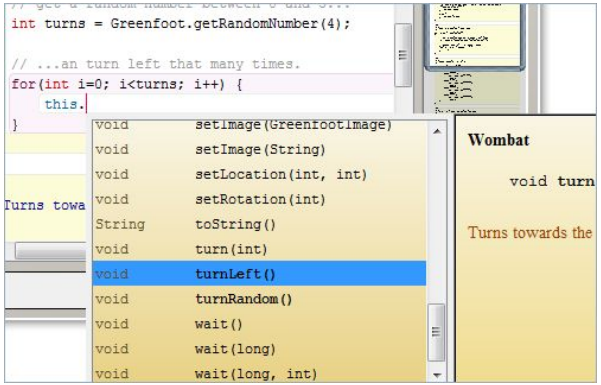
Github - How does it work?

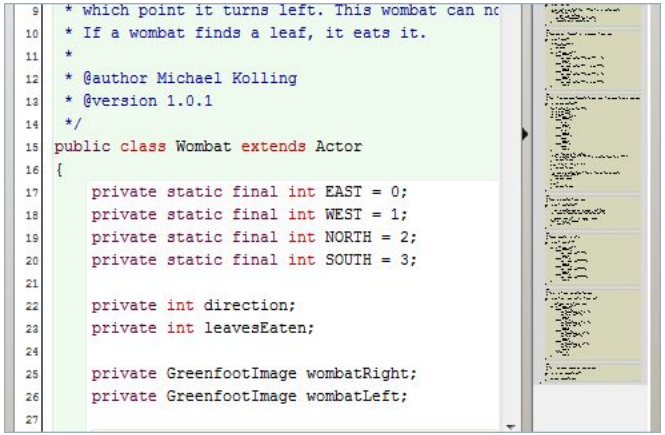
- Repositories
- Can be public or private
- Multiple developers
- Various branches
- Push and pull
- Backups
- Statistics

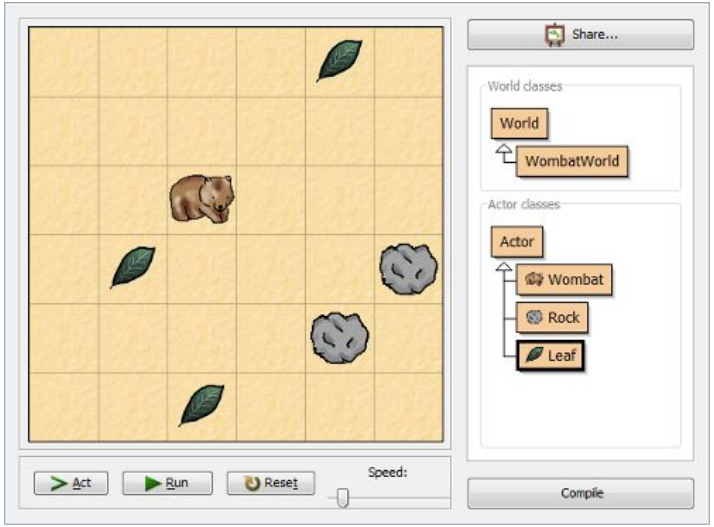


Greenfoot - What is it?

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







Greeps

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

```
/**
 * A Greep is an alien creature that likes to collect tomatoes.
 *
 * 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 MyGreep). 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