

Diagnosis of Programming Setbacks and Intervention at Scale

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Magenta

Lime

Peach

Violet

Teal

MARCH 10

HOMEWORK

Pythagorean
Heron's Project
Due Friday

Concert Sun
Friday March 13

Benchmark 3
March 11 - 13

Standard
Notation
Root factors
Product
Power

Scaling up the Games Academy - Small Class



Scaling up the Games Academy - Small Class



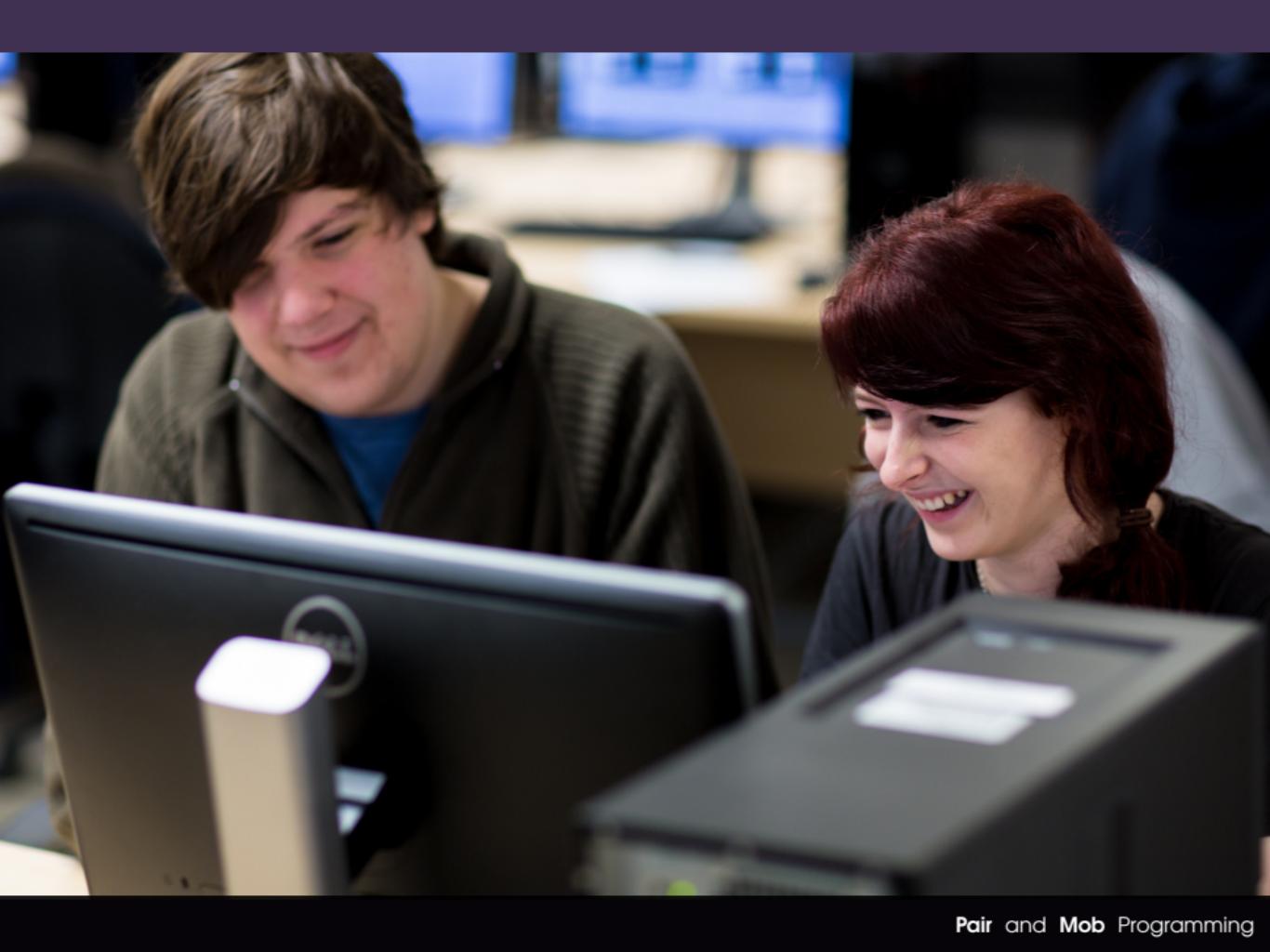
Scaling up the Games Academy - Large Lecture



Scaling up the Games Academy - Large Studio

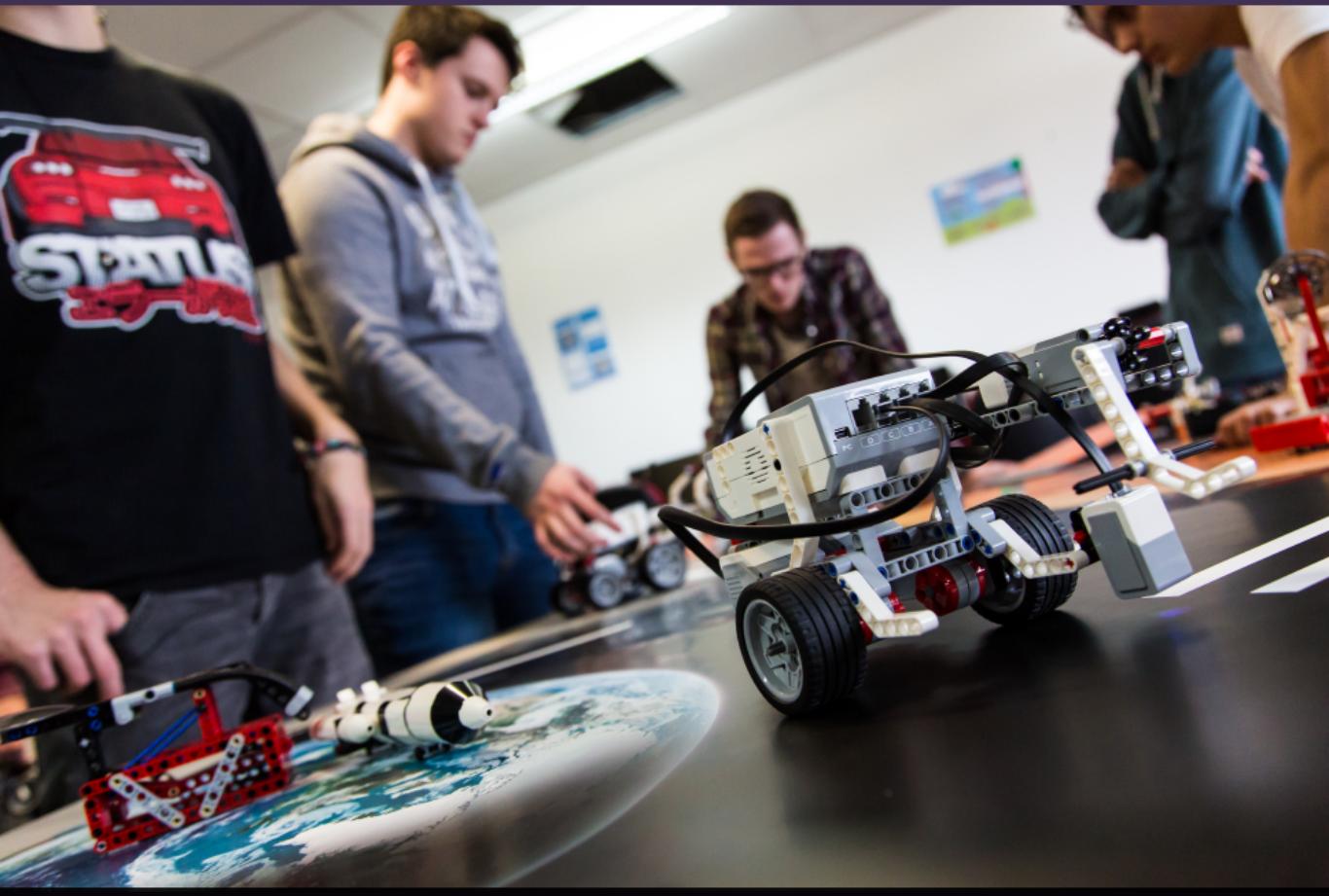


Scaling up the Games Academy - Large Studio





Pair and Mob Programming



Lego Olympiad



Lego Olympiad





Lego Olympiad

Peer Review plays an important role

SPARKPLUS Instructions X sparkplus.com.au/factors/ Apps Regulations, Policies discussion so far... PSJ DGRA template Import to Mendeley Post to CiteULike Adm Mail Computer Science Ed Game Career Guide It's the effect size, st... TCRcord Article NSSE Institute Encou... Other bookmarks

Links to other videos produced Post Fellowship

9. Who self-assessments should be included in Performance Factor calculations
This is a long video (15 minutes) you may want to view it in a number of settings

SPARK^{PLUS}: SPA (Performance) and SAPA (Feedback) factors

The following information has been taken from the SPARK^{PLUS} user guide that can be downloaded from spark.uts.edu.au

In the norm based assessment mode used to assess an individual's contribution to a team project or task SPARK^{PLUS} automatically produces two factors.

SPA (Performance) factor

The SPA (Performance) factor is a weighting factor that can be used to change a team mark for a project (stage) into an individual mark.

SPA Factor = $\frac{\text{Total ratings for individual team member}}{\sqrt{\text{Average of total ratings for all team members}}}$

Individual mark = team mark * individual's SPA

For example, if a team's project mark was 80 out of 100 and a team member receives a SPA factor of 0.9, they would receive an individual mark of 72 to reflect a lower than average team contribution as perceived by a combination of themselves and their peers. Alternatively, if not used to moderate summative assessment the SPA factor can be used formatively to assist student development.

In applying the SPA (Performance) factor we recommend that the maximum mark be capped at 100% to reflecting the maximum mark available for demonstrating the particular learning outcome or outcomes achievement. For example, if the project mark for a high performing team was 95% and the highest contributor to this team received an SPA factor of 1.1, then without capping this student would receive a mark greater than 100% of the marks allocated for demonstrated achievement of the associated learning outcomes.

95% * 1.1 = 104.5 > 100%

SAPA (Feedback) or Self Assessment to Peer Assessment factor

The second factor calculated is the SAPA (Feedback) or Self Assessment to Peer Assessment factor. It is the ratio of a student's own rating of themselves compared to the average rating of their contribution by their peers. This has strong feedback value for future development both for self-critical reflection and peer evaluation.

SAPA Factor = $\frac{\text{Self ratings for individual team member}}{\sqrt{\text{Average of ratings for individual by peer team members}}}$

It provides students with feedback about how the rest of the team perceives their contribution unusual by their own opinion. For example, a SAPA factor greater than 1 means that a student has rated their own team performance higher than they were rated by their team peers. Conversely, a SAPA factor less than 1 means that a student has rated their own performance lower than they were rated by their peers.

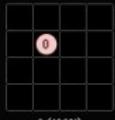
Which SPA Formula Should I Choose

Original SPA Factor	Linear SPA Factor	Knee SPA Factor	Original SPA Factor
0.8	0.8	0.8	0.8
1.0	1.0	1.0	1.0
1.2	1.2	1.2	1.15
1.4	1.4	1.4	1.35
1.6	1.6	1.6	1.55
1.8	1.8	1.8	1.75
2.0	2.0	2.0	1.95

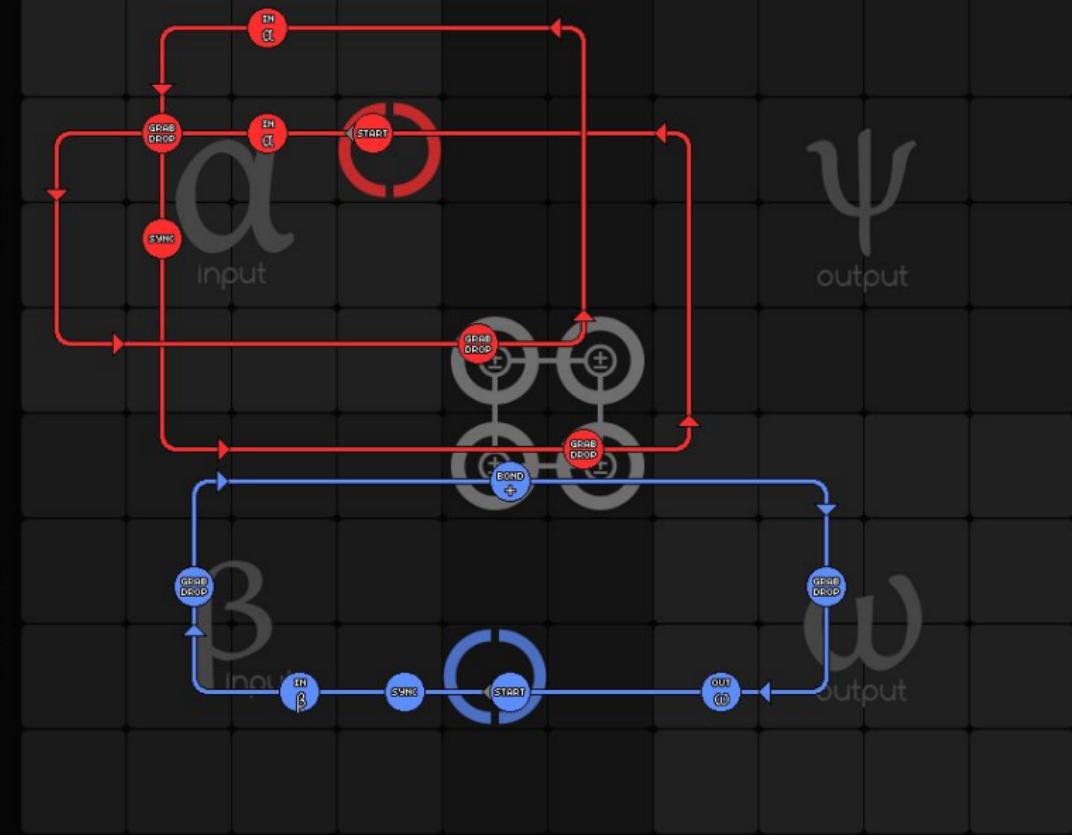
We use SparkPLUS to help contextualise peer review data



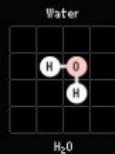
Feeds into CPD Tasks and Tutor Discussion



Story & Info
Exit Level

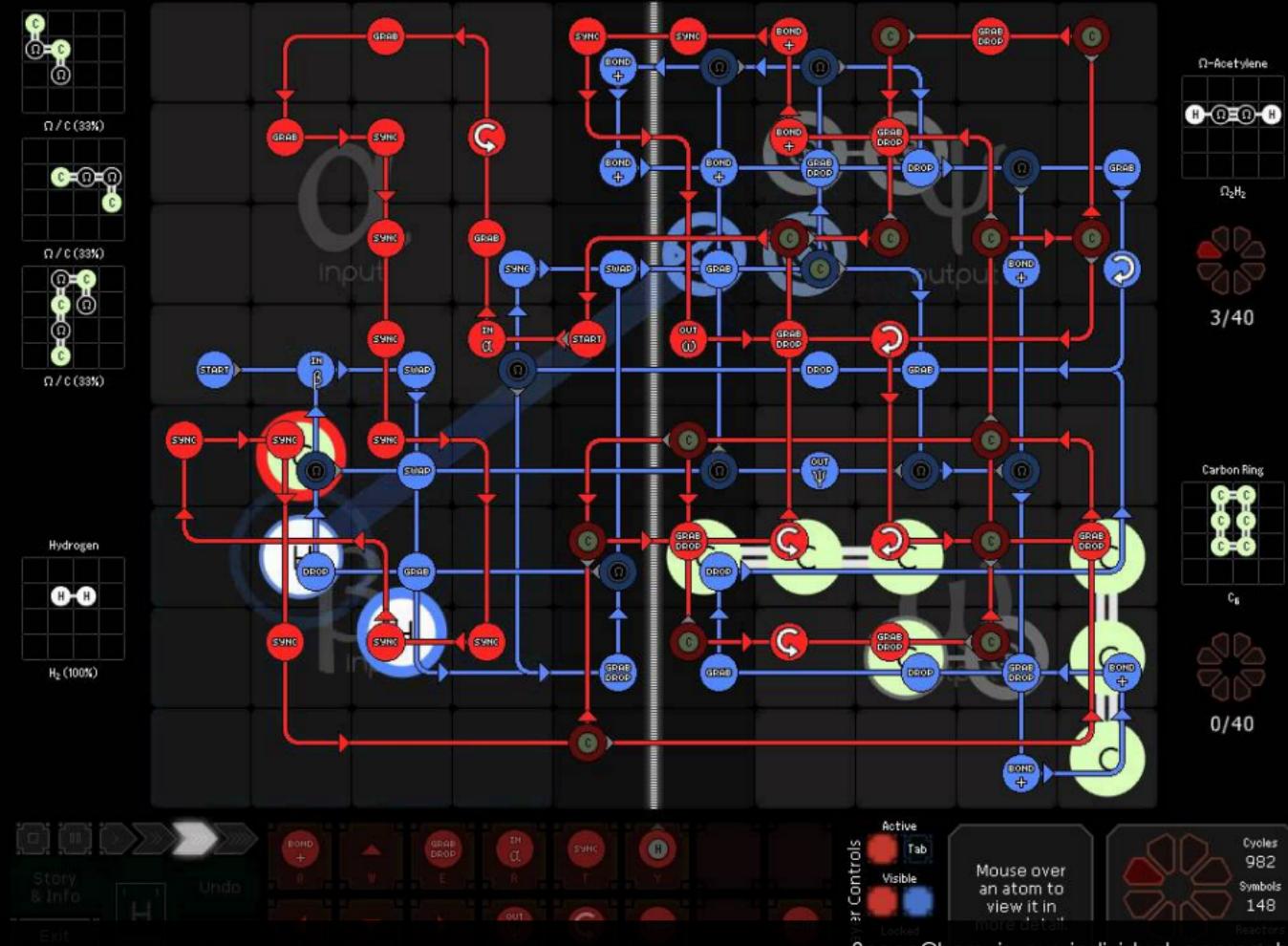


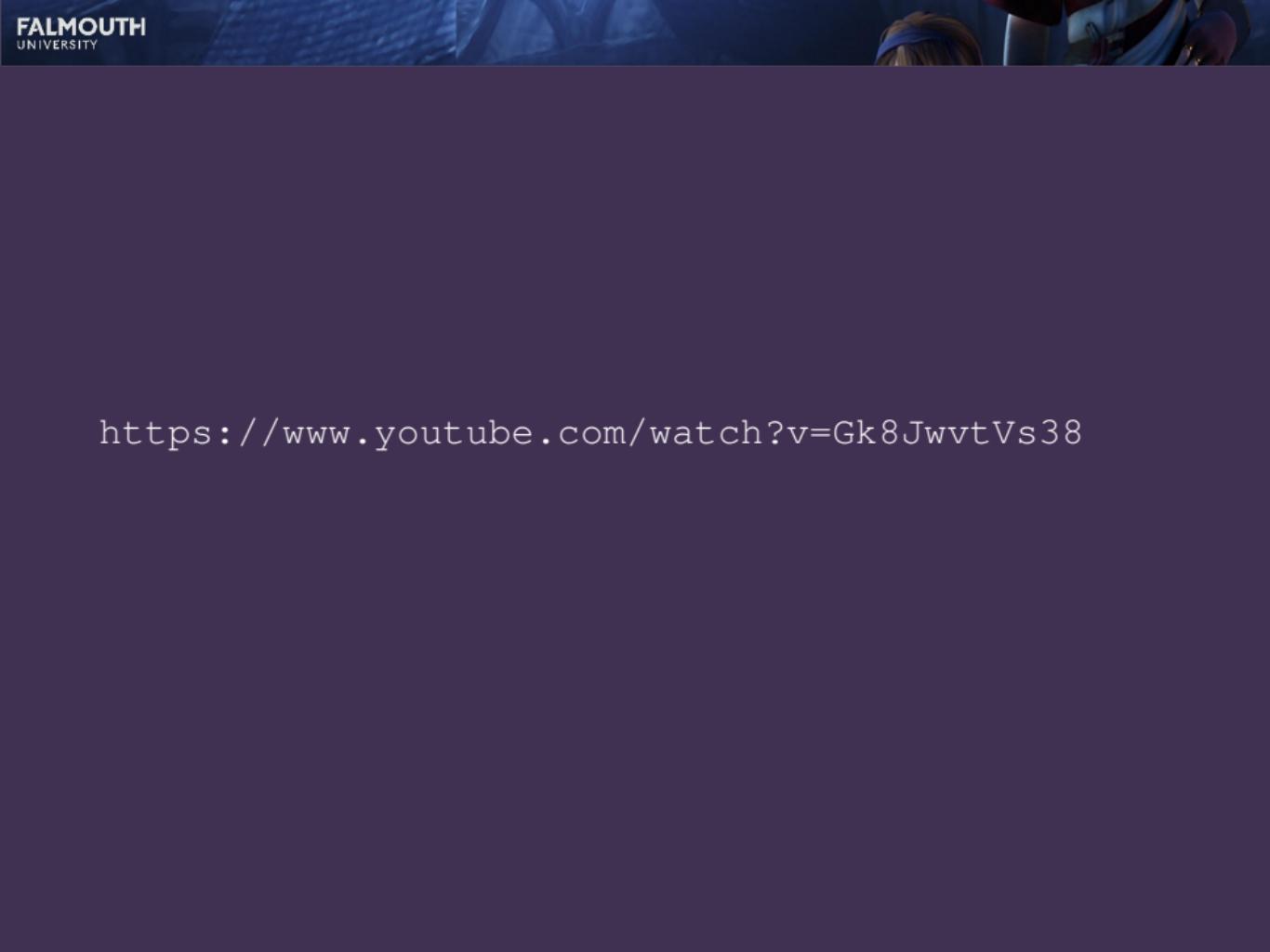
SpaceChem is our individual approach



Active Tab
Visible
Locked
Mouse over an atom to view it in more detail.

Cycles 0
Symbols 24
Reactors





<https://www.youtube.com/watch?v=Gk8JwvtVs38>

Socrative

Secure https://b.socrative.com/teacher/#final-results/18430151/12755402/question/1

Apps Policies discussion so far - Go PSJ DVGRA template Import to Mendeley Post to CiteULike Adhir Mail Computer Science Ed. Gamasutra Game Career Guide It's the effect size, stu... TCRecord: Article NSSE Institute Encour... Other bookmarks

#1 Read the following statements:

```
a = 10  
b = 20  
b = a  
print a  
print b
```

What are the values of a and b at the end of this program?

HOW'D WE DO? 8/8 students answered

A	a = 10, b = 10	50%
B	a = 30, b = 20	0%
C	a = 0, b = 10	0%
D	a = 20, b = 20	25%
E	a = 0, b = 30	0%
F	a = 10, b = 20	13%
G	a = 20, b = 10	0%
H	a = 20, b = 0	0%
I	a = 10, b = 30	13%

Socrative

Secure https://b.socrative.com/teacher/#final-results/18430151/12755402/question/2

Apps Regulations, Policies discussion so far - Go PSJ DVGRA template Import to Mendeley Post to CiteULike Adhir Mail Computer Science Ed Gamasutra Game Career Guide It's the effect size, st... TCRecord: Article NSSE Institute Encour Other bookmarks

#2 Read the following statements:

```
a = 10  
b = 20  
a = b  
print a  
print b
```

What are the values of a and b at the end of this program?

HOW'D WE DO? 8/8 students answered

A	a = 10, b = 10	0%
B	a = 30, b = 20	0%
C	a = 0, b = 10	0%
D	a = 20, b = 20	100%
E	a = 0, b = 30	0%
F	a = 10, b = 20	0%
G	a = 20, b = 10	0%
H	a = 20, b = 0	0%
I	a = 10, b = 30	0%

Socrative

Secure https://b.socrative.com/teacher/#reports

Apps Regulations, Policies discussion so far - Go PSJ DVGRA template Import to Mendeley Post to CiteULike Adir Mail Computer Science Ed Gamasutra Game Career Guide It's the effect size, st... TCRcord: Article NSSE Institute Encouraging... Other bookmarks

[Controllers-2] Psychology of Game Interaction

COMP140 1 IntroToHCIFor

Tinkering Audio Quick

Tinkering Audio Quick

Week 7 Review Quiz

[COMP120] Session 4: Mod

[COMP120] Session 4: Mod

[COMP120] Session 4: Mod

[COMP110] Race - Condition

[COMP110] Session 3b: Con

[COMP110] Race - Loops

[COMP110] Session 3a: Loops

2/22/16
2:04 PM

jBYPc3BBY

Quiz

PC3BBY

Space Race

PC3BBY

Quiz

PC3BBY

Space Race

PC3BBY

Space Race

PC3BBY

Space Race

Select an option below to end the activity and save the reports.

 Get Reports

 View Chart

 To Launch

Which report(s) would you like?

Whole Class Excel

Individual Student(s) PDF

Question Specific PDF

How would you like your report(s)?

 E-mail

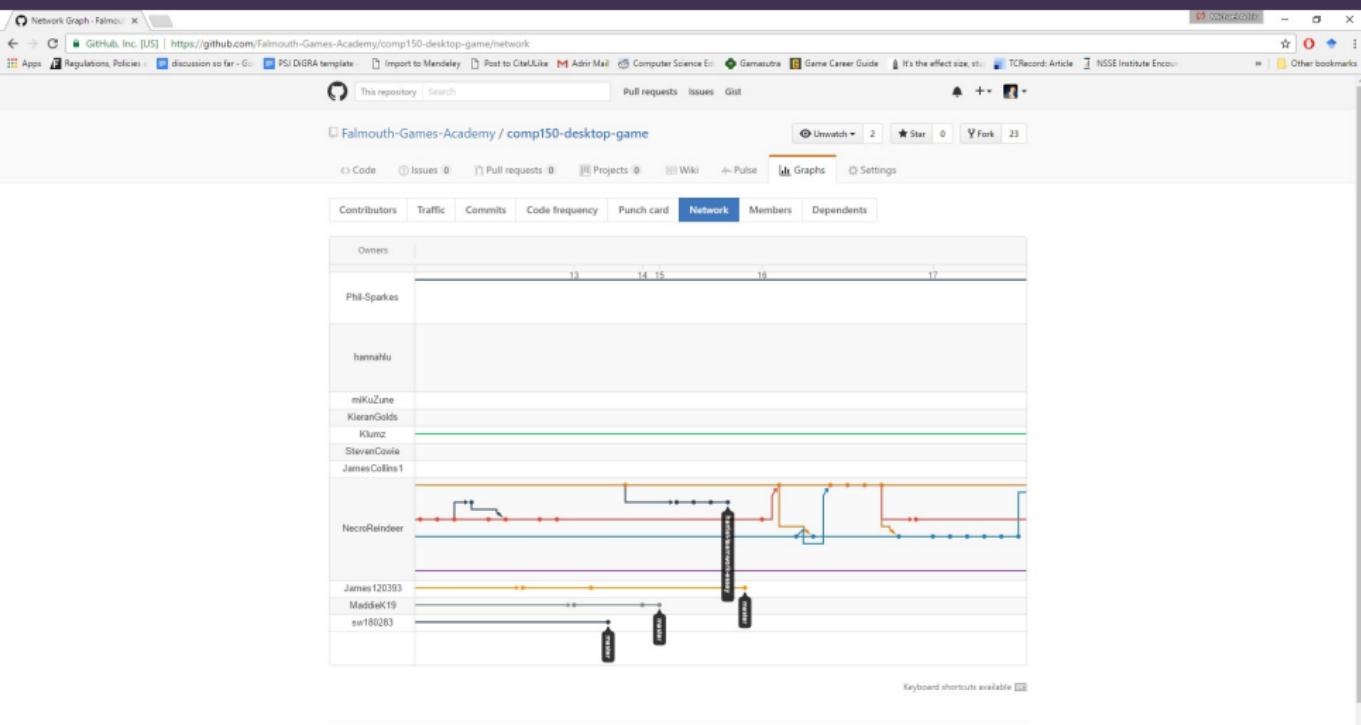
 Download

 Google Drive

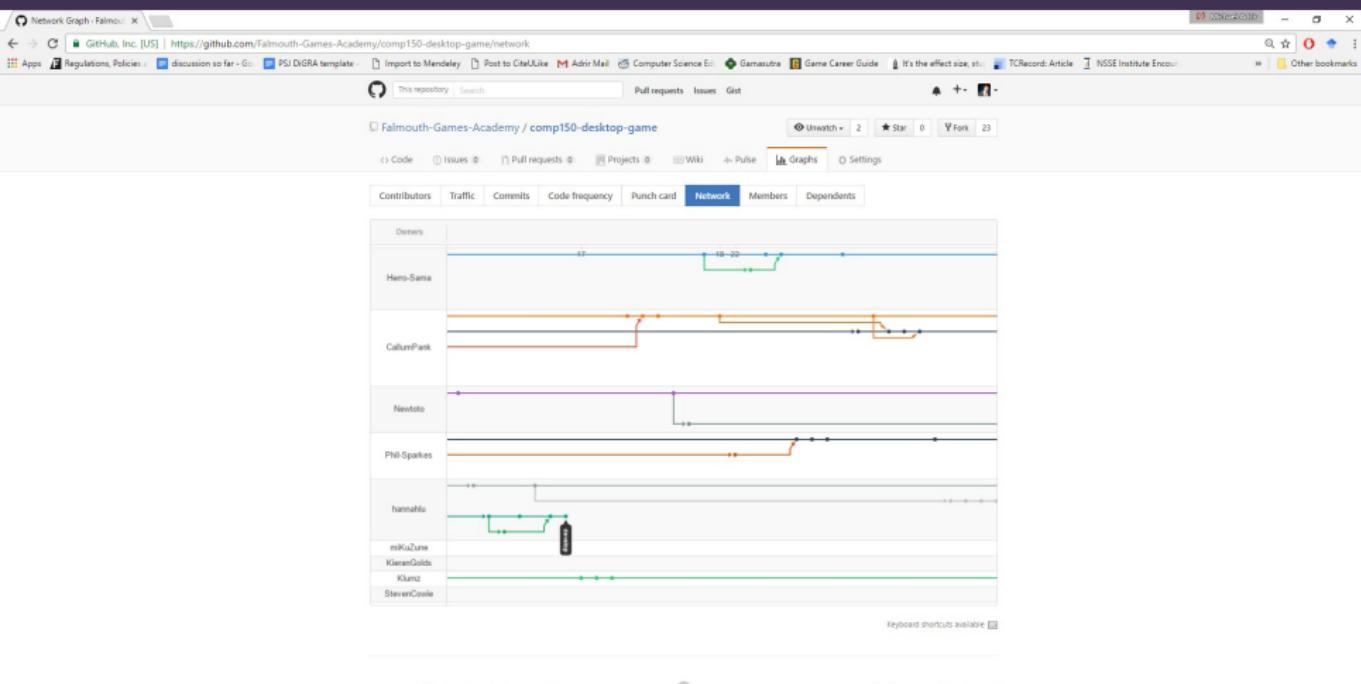
10/7/15
9:37 AM

jBYPc3BBY

Quiz



Tracking projects on GitHub



Tracking projects on GitHub

Code for review by Tristian Karlin | <https://github.com/Falmouth-Games-Academy/comp120-tinkering-graphics/pull/36>

GitHub, Inc. [US] | [Regulations, Policies](#) | [discussion so far](#) | [PSJ DGRA template](#) | Import to Mendeley | Post to CiteULike | Adir Mail | Computer Science Ed | Gamasutra | Game Career Guide | It's the effect size, st... | TCRcord Article | NSSE Institute Encour... | Other bookmarks

2016-11-01

Adir reviewed on Nov 1, 2016 | View changes

I have reviewed `main.py` and left in-line comments. Significant improvements can be made in terms of sophistication and maintainability by restructuring into functions and reformatting according to PEP-8 requirements.

`#120 vector_space/main.py`

```
11     *BLUE = (0, 0, 255)
12
13     *
14     +windowWidth = 256
15     +windowHeight = 256
```

Adir on Nov 1, 2016 · Member
Are these values supposed to be constants?

Reply...

`#120 vector_space/main.py`

```
14     +windowWidth = 256
15     +windowHeight = 256
16
17     +tailLength = 20
```

Adir on Nov 1, 2016 · Member
Change to the PEP-8 style for variable names: `lower_case_with_underscores`.

Adir on Nov 1, 2016 · Member
e.g. `tail_length`

Reply...

`#120 vector_space/main.py`

```
18     +luerotal = 0
19     +luecont = 0
20     +doingSomethingToPassTheTime = 0
21     +firststart = True
```

Adir on Nov 1, 2016 · Member



Current Obstacles



Ongoing Work and Challenges