Monday, February 2\textsuperscript{nd}, 2015 Open House and Hour of Code:
This session was organized by The Anita Borg Institute Scholars' Community, Women@SCS and Google. The girls did the "Hour of Code" using code.org/learn while parents and guardians joined Dr. Frieze and undergraduate students from Women@SCS for a presentation including the following:

--what's happening re computer science education
--why we all need to promote girls/women in computing
--highlights of doing the computer science major
--computer science courses, classes and other activities
--careers in computing
--what you can do now to help prepare your kids for a future in computing

Afterwards, everyone gathered to see winning teams receive their prizes and for Cupcakes provided by Google!
Hour of Code!

Anita Borg Birthday Celebration 2015

Google Anita Borg Scholars Community and Women@SCS

By: Ruta Desai
Anita Borg (1949-2003)

- In computing in her mid-20s
- 1981: Ph.D. in CS, New York University
- Research career at industry giants
Google Anita Borg Scholars Community

Community of former scholarship recipients and finalists

Impactful outreach
Let’s program a video game!

We are going to learn a programming language called Python!

Help your hero Anya to acquire gems and fight ogres!
How to play?

1. Go to [http://code.org/learn](http://code.org/learn)

1. Find **CodeCombat** and click Go!

1. Click play and start playing, oops coding!

1. Follow instructions at each level - look for yellow arrows!
Two teams who finish the most levels will win decks of playing cards featuring women computer scientists!

Ready, Set, GO!!!!
So what was all that?

Let's go back to Scratch!!

How did you code?

```
self.moveRight()
self.moveDown()
```
Objects and functions/methods

What else did you control in Scratch? Do you think it is an object?

What other functions did you use?
Functions can take inputs.

.. and give outputs based on inputs.

**Function**

- `moveXY(X,Y)`
- `attack("Brak")`

**Function’s parameters**

- X and Y positions: Where to move
- Ogre’s name: Whom to attack
- Num. of steps: How much to move
- Rotation angle: How much to turn
- X and Y positions: Where to move
Loops

When do we use loops?

Loops make repetition of same steps easy!

SCRATCH

loop:

CodeCombat

while true:

for x in range in (0,3):

Python
Conditional statements

.. to execute steps only if some condition is satisfied

Scrabble

if condition1:
    execute A
else:
    execute B

CodeCombat

if enemy:
    self.attack(enemy)
else:
    self.attack("Chest")
What did we learn today?

Basic concepts of OOPS! - Object oriented programming. Lots of such languages are popular today. Python is just one of them!

Writing code in formal language.

Learn more on code.org/learn!
Find more events and inspiring women across the world on Google Anita Borg Scholars Community’s Facebook page!
That’s all folks!

Time for a quick survey!

Tell us what you think about today’s session:
http://tinyurl.com/TechnightsFeedback
Thank you!
Can you think of some other objects?

<table>
<thead>
<tr>
<th>Object</th>
<th>Properties</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>car</td>
<td>name = Fiat</td>
<td>car.start()</td>
</tr>
<tr>
<td></td>
<td>model = 500</td>
<td>car.drive()</td>
</tr>
<tr>
<td></td>
<td>weight = 850kg</td>
<td>car.brake()</td>
</tr>
<tr>
<td></td>
<td>color = white</td>
<td>car.stop()</td>
</tr>
</tbody>
</table>

What if I want to create and use a “truck object” in my code world now? Do I have to write all the methods again? Nooooo!

Dont worry CLASSES are here!
What would be the class of our hero Anya?

Class of HEROS!