Week 2/3
Game Development with Python

CoderDojo Bray

Session #2/3
What will we do today?

- Boring Stuff
  - Check set-up - Python 3.x, IDLE GUI, Pygame

- Fun Stuff (in no particular order)
  - Play with Python
  - CoderDojo Concepts
  - Quick review
  - Look at sample Game & Code
  - Example Projects
  - "Your mission, should you choose to accept it…"

Setup – check!

- Have you got these installed/downloaded?
  - Python 3.x.x
  - Pygames (fresh install may be required)
  - "Invent Your Own…" eBook

- Do you know where these are?
  - IDLE (Python GUI)
 - Python Folder
  - The eBook

Hint: Put shortcuts on your Desktop or Taskbar!

CoderDojo is …

- Fun! – If we're not enjoying it, we're not doing it right
- A coding club where YOU learn coding by coding. With assistance from
  - Your neighbours
  - The Python Team around you (#crowdsourcing)
  - The InterWeb - "Google is your friend" (#googleit)
  - The Mentors
- How?
  - Play with Python, you won't break it!
  - Learn the "hard" way – by using it
  - Follow the tutorials in the book
  - Mentor explanations
  - Sharing with those around you (your code & your ideas)
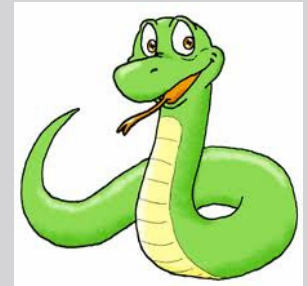 - Accepting the Ninja Challenges!

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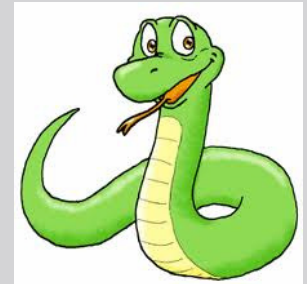
Quick review

If you are happy with last weeks coding, carry on at your own pace. Otherwise...

- The IDLE GUI
  - As a Command Line Interface (trying simple functions)
  - Code Editor (coding, saving & running your projects)
- Maths – inc. Integers & Floating Point numbers
- Variables & Strings
- Hello World!

Any questions, ask your neighbour or a Mentor

Guess the number game

- Chapter 4 – guess.py
- Simple game – still no graphics

If you are happy with all code & function calls, carry on at your own pace. Otherwise…

- Mentors
  - Will do a sample run on screen
  - Look at key concepts/functions
- Then (with neighbour or group if you wish)
  - Input code yourself
  - Run the Game
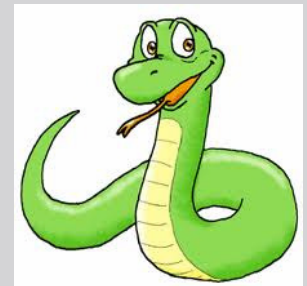- Get help from neighbour, team, mentors
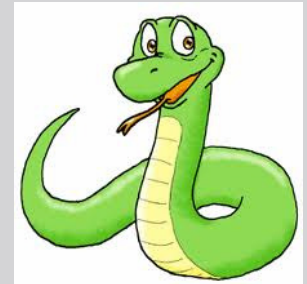
Sample Projects

What program/game would YOU like to use/play?

Some examples
- 2012 Projects on coolestprojects.org
- dodger.py – Chapter 20, last game in the book!
  http://inventwithpython.com/dodger.py
- Varelse from Pygames
  http://www.pygame.org/project-Varelse+%28Python3%29-1885-.html

Your mission, should you choose to accept it... <intro>

- Challenges can be done in the Dojo or at home
- Work alone, with your neighbour or a group
- All you should need is in the eBook (later challenges may need external resources)
- Google is your Friend
- If all else fails, get some hints from a Mentor
- If you like, think up some challenges – we can share them with others (#opensource #crowdsourcing #sharingiscaring)
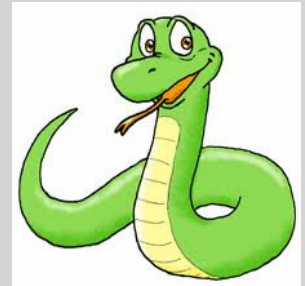
Tell me a story

Write a program to ask me questions and then tell me a story like this

"*A long time ago in a Galaxy far far away, lived a brave handsome & brilliant Jedi Knight called Shaun Gon Ninja. He looked ageless and ever youthful but was in fact 42 years old. For breakfast every morning he had KitKats & High Caffeine Coffee. He always followed this by going to the park and rescuing kittens...*" etc.
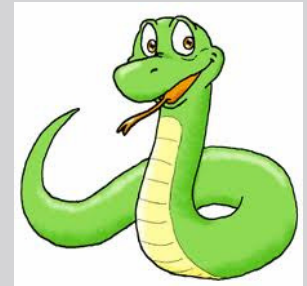
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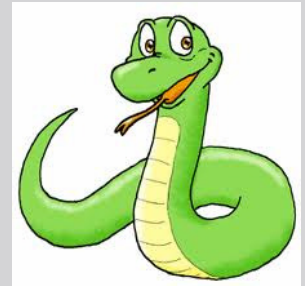
Maths Checker

Design a game that

- Gives the player a number
- Asks for a maths expression that will give that number
- Tells them that it is correct/incorrect
- Allows a certain number of guesses

Next Week …

- Review what we've done on the book, looked at on the InterWeb, the Challenges and, if you wish, look ahead at further topics

- Learn Coding by Coding (the "hard" way)

- Become a Creator of Tech, not a consumer

- Use all resources e.g. next page…

- Send us your code & ideas

Resources – CoderDojo Bray

- Use the Shared Folder
  http://bit.ly/DojoPython
  - .doc files with useful links for each week
  - .doc files for the "Ninja Challenges"
  - .pdfs of the presentations
  - Project template & example

- Keep an eye on
  - coderdojobray.com
  - @CoderDojoBray
  - bray@coderdojo.com

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