Date:	4th May	Time:	09:30 - 11:00 & 14:15 - 15:45
Venue:	Rm 4210 OR Rm 4213	Expected no. of students:	20 per class
Expected Level of students:	F.2 to F.4	Context:	Coding/Programming in Python
Foci:	Loops, Lists, Game Creation		

Intended Learning Outcomes

By the end of the lesson, students should be able to:

- manipulate lists to store and retrieve data.
- work well with Python loops to repeat similar sets of instructions, or to iterate through lists.
- create an medium-sized text-base game.

Basic Rundown

- Teachers use Mentimeter to do a short recap of previous lesson's concepts.
- Teachers clear the misconceptions (if any).
- Teachers demonstrate the final game, and state the lesson's goal.
- Teachers introduce the agenda of the lesson.

  (The above takes $\leq$ 10 minutes)
- Teachers teach the foci one-by-one.
  - Loops ($\leq$ 15 minutes)
    - Teachers introduce the `while` and `for` loops.
    - Students practice loops with examples given.
  - Lists ($\leq$ 15 minutes)
    - Teachers introduce what lists are.
    - Students practice mutating and accessing functions of lists with examples given.
    - Students apply lists with loops and knowledge from previous lesson.
  - Final game ($\leq$ 30 minutes)
    - Teachers guide students into implementing their own final game with the given Jupyter Notebook file.
- Teachers summarise what students have learnt throughout the 2 lessons.

Materials

- Computers at the venue to allow students to have hands-on experience in programming.
- A set of lecture notes to assist teachers in the lesson and students to follow along.
- Small props (paper boxes, for example) to visualise certain concepts.
- 2-3 sets of Jupyter Notebook `.ipynb` files to allow students to code along in the lesson.
- (TBD) Prizes (snacks, for example) for answering questions.