PROPOSAL

YOUNG MALAYSIAN ENGINEERS UK

INTRODUCTION TO PYTHON WORKSHOP LONDON 2019

(Maybe need a catchy name?)

What?

An interactive workshop on the fundamentals of Python programming language, demonstrated by experienced students.

#can be a series of workshops but we should wait for the teachers to confirm their availability, venue etc.

Why?

* To introduce Python, an interpreted programming language for Malaysian STEM students in London.
* To enable students to be aware of rising applications of technologies, especially in industries, academia and corporate world.
* To give hands-on experience on not just learning the syntax and principles behind Python but also on implementing them using real life examples.
* To provide the support and guidance from the teachers who are well experienced in the subject and build contacts with them.
* #To give opportunity for the teachers, who are essentially Malaysians, to contribute, teach and inspire the participants as well as possibly get inspired to do more in the future.
* Why Python?

- Unlike MATLAB, it’s free and very user-friendly; anyone can use it

anywhere. Has wide range of uses: websites, machine learning, algorithms

And also simplifying and automating day to day tasks. A hot topic right

Now, so don’t get left behind!

Who?

* Malaysian students who pursue STEM degrees in the UK but the event will be in London (possible extensions later).
* Also open to interested students with non-STEM degrees.
* No prior experience required but preferably has good analytical skills.
* Demonstrated by teachers, we call them Hunters (Cause Python? lol), who are preferably experienced Malaysian students.
* Numbers: Expected around 50 pax and at least 13 Hunters. So, the students to Hunters ratio is around 4:1.

When?

* Weekends(Sun: one day workshop) in January or February.
* Lasts from 9am till 6pm with 1 hour lunch break.

Where?

* Imperial College London as we expect most of the participants from here.
* Can book venues via Imperial Msoc, so should be free.
* Can be in computer labs but non-imperial students cannot log in, so everyone is recommended to bring their own laptops. Can be a lecture theatre with alternating rows filled, so the Hunters can move around.
* Lecture theatre to welcome everyone and to distribute food.
* Numbers: 3/4 classrooms to accommodate at least 15 students in each.

Event Flow

* Schedule:

|  |  |  |
| --- | --- | --- |
| Time | Programme | Remarks |
| 9.00 - 9.30am | Registration |  |
| 9.30 - 10.00am | -Welcome Speech  -Sort students into the classes |  |
| 10.00 - 1.00pm | First Session | With occasional breaks |
| 1.00 - 2.00pm | Lunch Break |  |
| 2.00 - 5.00pm | Second session | With occasional breaks |
| 5.00 - 6.00pm | -Closing Speech  -Winner announcement  -Networking session (optional) |  |

* Should be the same for a series of workshops but with more advanced materials.
* Departments:

1. Python development team

* Builds the worksheet the participants will be working on and a handout containing notes of the workshop.
* Consists of the Hunters and at least two BoDs.
* Creates a coding competition and possible exercises (can get examples online).
* Exercises/examples within the worksheet become increasing hard but not so much. A cool idea is to use YME and our sponsors in the examples, so we can show it to our potential sponsors in the future.

2. Event Management Team

- Ensures the event runs smoothly in all aspects.

- Responsible for the food, security, crowd control, registration etc.

- Consists of BoDs of YME (Hire volunteers if need more hands)

3. Marketing Team

- Promotes the event in social media, email via posts, posters etc.

- Prepares slides during the Welcome and Closing speeches.

- Oversees the application process and notifies the participants

about the results.

- Application process:

- online form or something more fun!

- short questions; prior experience, technology, laptop memory etc.

- Can make a specific selection procedure or first come first serve

basis (I prefer later).

- Gather post-event feedback.

- More on Python workshop itself

- Jupyter Notebook will be used for the worksheets. The participants will be

asked to download and install Anaconda package (free, need ~600mb)

from the internet (better to install it prior to the event).

- First session:

After the participants are sorted into their classes, the Hunters will explain

the fundamentals of Python (can use whiteboard) for about 20 min. The

participants will then use the notebook interactively to go through the

examples given. They can ask the Hunters for help if they get stuck. To

avoid long waiting time, the worksheets should be straightforward and

easy.

- Second session:

Similar to the first one but involves a small coding competition at the end

of session. Winner will be announced later.

- Materials to cover will be decided soon after we have gotten our Hunters

(at least a few first).

- Non-imperial students can use Eduroam to log into the Wifi.

* Budget:

|  |  |  |  |
| --- | --- | --- | --- |
| Items | Quantity | Expected price per quantity | Total price |
| Hunters | ~13 | Possibly volunteering, so free of charge.  If not, we need to set a price :( |  |
| Catering | ~60 | ~£3 | £180 |
| Subsidy of travel |  | (no idea) |  |
| Prizes for competition | 1 | £30 | £30 |
| Printing material (handouts) |  |  | £5 |
| Miscellaneous |  |  | £20 |
| Total |  |  |  |

* Can sell refundable tickets for the event for £5 to confirm their attendance.

An example of Jupyter notebook.

