PYTHON BYTES CLUB

#### Python Bytes Parent Info Night

#### From Beginner to Advanced Coder in 8 months

#### Agenda

Goal of the Python Byte Club - Why Coding, Why Python Plan - syntax, practice, team, project, forum via discord, Two levels of Class : Level 1 & Level 2 Coaches & Volunteers Programming Competition Club



Invoke students' interest into coding

**Teaching Python Language Fundamentals** 

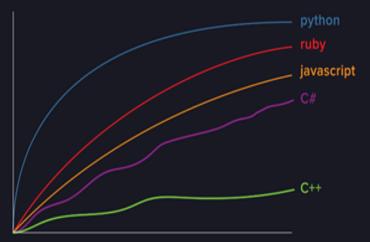
Learning by doing

Study group

Allow students to advance at their own pace

#### 5 reason to learn Python

based on skill level



<sup>3-</sup>month time span

#### JAVA

```
public class HelloWorld {
   public static void main(String[] args) {
        System.out.println("I'm awesome");
```

++

```
int main() {
std::cout << "I'm awesome.\n";
```

#### Python

print("I'm awesome")

#### 5 reason to learn Python

- 2. Useful: Once you learn it you can find opportunities in Automation, web development, data science, machine learning, AI, web scraping, game development,
- 3. Value and Demand
- 4. Community & Open Source
- 5. Resources over 125,000 third-party Python libraries

If you want to learn coding but haven't decided what to do with it then Python is the obvious option. As it gives you a choice to switch between different fields with its flexibility.

#### Levels of Class

Level 1 - Beginner

Students who have zero coding experience

Start from Syntax, then move on with projects

Level 2 - Intermediate

Students learned Python Syntax

Start projects from the beginning.

#### Level 1 Schedule

Wednesdays 6:30 - 8 pm, on Zoom meeting

- 45 min lecture
- followed by small group breakroom sessions
- Daily read or practice for 10 minutes.
- Followup and doubt clearance over discord

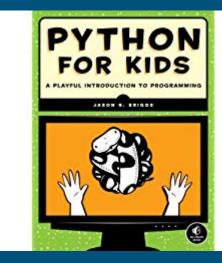


Classroom: Teach The basic Python Syntax Ch 1- 12

Study group: Meet weekly

- 1. Review the Python syntax
- 2. Solve the **puzzles**
- 3. Code the projects
- 4. Have fun

Online coding Platform: https://replit.com/



#### Level 2 Schedule

Wednesdays 6:30 - 8 pm, Zoom meeting

- Project based learning
- CodingGame
- Programming Competition Optional: Thursdays (more details to come)

#### The Path to Proficiency

<u>Classroom</u> Lecture and common homework questions Online Web Tools Self-paced, individual coding practice

Weekly Study Group Coding along with Coach and friends Discord Server Post your questions there. Get answer from next meetup or sooner

Project Team projects to put the learning into practical use <u>Competition</u> Join programming competition club, learn problem solving with coding

### Plan cont.

Project: Small Group Projects using repl.it online IDE or python IDE

Discord: Online communication Server to collaborate.

Team coach to help team:

- a. Learn Python along with kids.
- b. Remind them to read the book.
- c. Coach the team to solve the puzzle, complete the project, make progress.
- d. Help team to ask clear questions (in session or over Discord).

#### Fundamentals

The 3 things to commit to in your Python Bytes journey

- 1. Code every day
- 2. Find the right problems
- 3. Build un-stuck-ify methods and skills

#### The volunteer team - so far...

Chair: Reji Dasan

**Advisors**: Rob Fatland (UW Computing Director), Wei Lu (Advisor & Level 2 Lead Instructor)

Parent Instructors : Hu Dong, Royce Wong, ( seeking more.....)

Other Coaches: Aadya, Kesh, Sai, Akansh, Nandini, Dhruv, Logan

## **Requirements & Logistics**

- Need a home laptop to install Python tools for the coding projects. (school laptop would not work)
- Year Long Club meets every Wednesday Zoom 6:30 p.m. 8:00 p.m.
  - Follows BSD Calendar, Breaks and Holidays
  - Will have few in-person events in School Campus
- First Session: October 12 (Wednesday), 6:30 p.m.
- Check and respond in Discord, such as cancellation of club activities, other announcements
- Tyee PTSA membership

# Programming Competition Club - Johannes Grad

What is the Programming Competition Club?

The starting point to compete.

Multi-year effort in programming competition preparation.

What type of student might benefit for joining both Python Club and Programming Competition Club?

Registration Info: Please attend Parent Info Night on 9/29 at 7:00 p.m. Check Tyee Times for details

## **Registration - Python Bytes Club**

- Seats available: 50 (including both Level 1 & Level 2)
- Registration Opens: October 3 (Monday), 4:00 p.m.
  - tyeeptsa.org -> Programs -> Python Bytes Club
- Registration Fee : \$50 (non-refundable)
  - Scholarships available
- Tyee PTSA membership required prior to registration (please join or renew here <u>https://tyeeptsa.org/</u>)
- First Session: October 12 (Wednesday), 6:30 p.m.
- Contact <u>tyeepythonbytes@gmail.com</u> or <u>pythonclub@tyeeptsa.org</u> for more information (including scholarships)