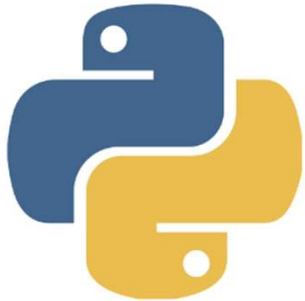


Python Bytes Parent Info Night



Tyee PTSA Python Bytes Club

From Beginner to Advanced
Coder in 7 months

Agenda

- Goal of the Python Bytes Club
- Coaches & Volunteers
- Why Coding, Why Python
- Plan - syntax, practice, team, project, forum via Discord
- Registration Information

Introduction

Python Bytes Club aims at teaching basic programming concepts to middle schoolers using Python Programming language. The goal of the club is to introduce coding as a habit and a fun activity rather than as a task. This year we are bringing in a brand-new format for the club and a hands-on activity-based curriculum which would be super exciting. We have very experienced adult coaches and mentors teaching the club and high school coaches helping with small group learning.

Goal

Invoke students' interest into coding

- Coaching on Programming Concepts with hands on activities
- Teaching Python Language Fundamentals
- Convert Ideas to Python Code and then to Projects
- Study group
- Allow students to advance at their own pace

The volunteer team - so far...

Chair

Ting Wu: has a Master degree in Computer Science and has been coding professionally for the past 13+ years. She is passionate about teaching.

Lead Coach and Curriculum Director

Rob Fatland : is the UW Director of Cloud and Data Solutions. He has formerly worked at NASA and Microsoft Research and has a PhD in Geophysics. His interests are in data science across the full spectrum from acquisition to collaboration with emphases on remote sensing, sensor networks, visualization, data systems and (domain-wise) the earth's hydrosphere. He also devotes time and energy to K12 STEM education.

Lead Coach

Zehua Liu

Principal Software Engineer and Technical Manager at Microsoft, 13 years of experience in the search engine advertising industry.

Zhong Wu

Work as a Software Engineer. Proficient in Python library for Azure Media API, web data mining etc.

Coaches

Dhruv Saini

Jeffrey Li

Keren Sandoval menendez

Shreya Agarwal

Pranav Dasan

Diana Zhou

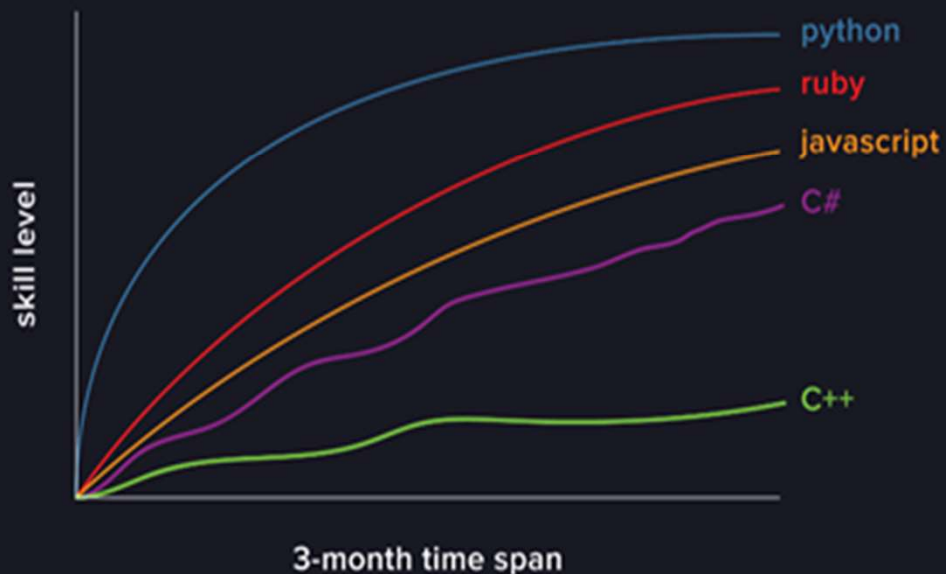
Sai srinivas pasyavula

Deeksha Dachepalli

Why Python? 5 reason to learn Python



Learning a New Stack
based on skill level



JAVA

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

C++

```
#include <iostream>  
  
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.

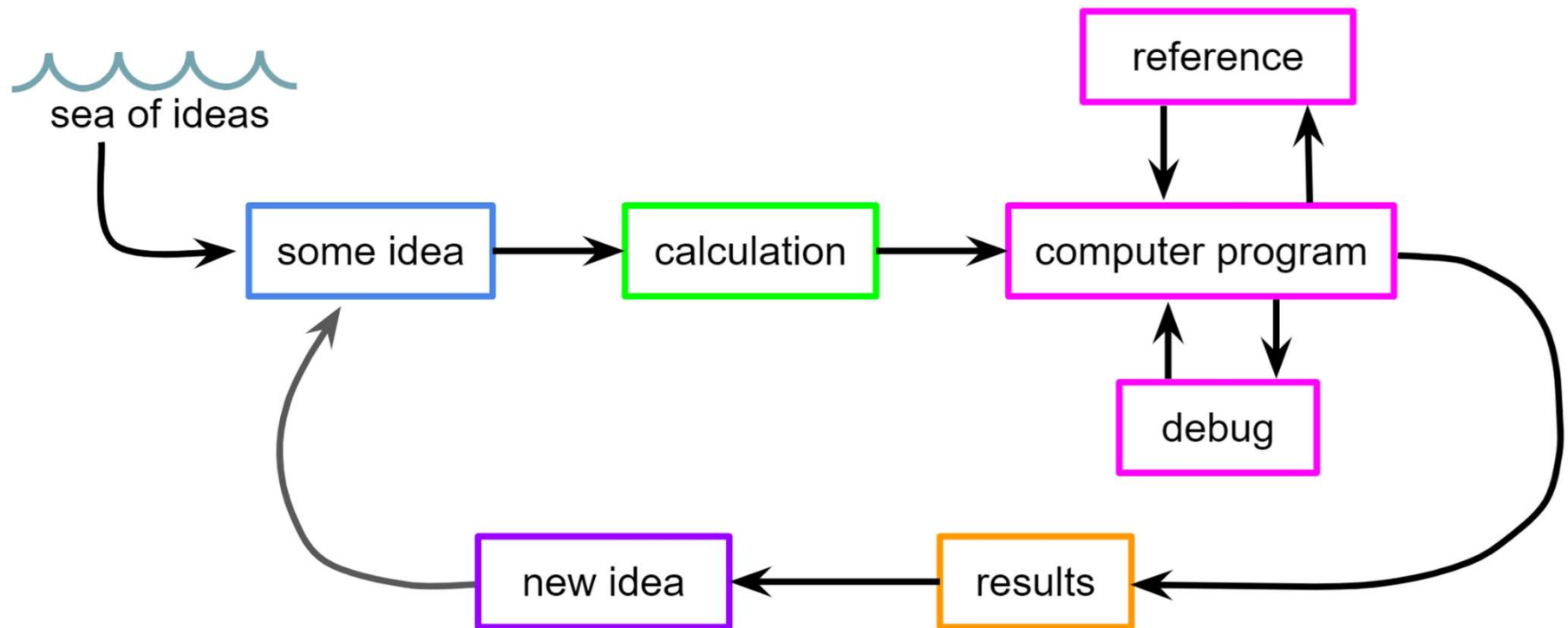
3. Value and Demand

4. Community & Open Source

5. Resources - over 125,000 third-party Python libraries

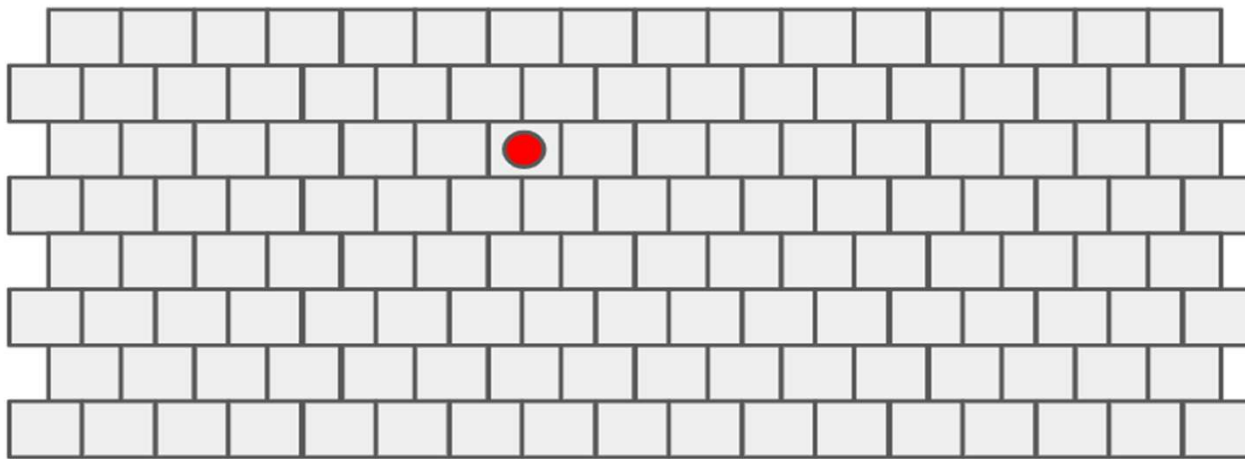
If you want to learn coding, but haven't decided what to do with it, then Python is the obvious option; as it gives you a choice to switch between different fields with its flexibility.

Why Coding? Convert Ideas into Projects



Convert Ideas into Projects

idea: a simple rule for an empty 1D universe is rather dull... until one day a ● appears. What happens?



+	●	○
●	○	●
○	●	○

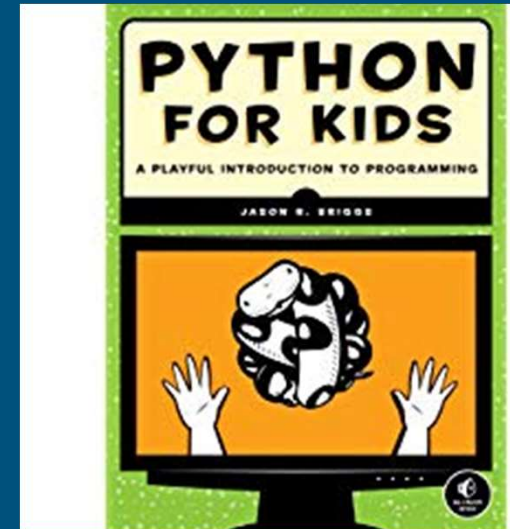
Plan

Classroom: Discuss concepts and ideas and hands-on activities to understand the concepts

Study group:

1. Review the Python **syntax**
2. **Code** the ideas into projects using Python
3. Have **fun**

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



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 use the pdf book to delve deeper and refer for syntax etc.
- c. Coach the team to implement the idea, solve the puzzle, complete the project, make progress.
- d. Help team to ask clear questions (in session or over Discord).

Requirements & Logistics

- Need a personal laptop (school laptop would not work)
- Year Long Club - meets **every Wednesday @Tyee In-person 6:30 - 8:00 p.m.**
Follows BSD Calendar, Breaks and Holidays
- Parents are required to volunteer **at least twice** for this school year.
- Students must respect and follow the requests of student coaches and volunteers.

Registration - Python Bytes Club

- Seats available: 50
- Registration Fee : **\$50 (non-refundable)**
 - Scholarships available
- Tyee PTSA membership required prior to registration (please join or renew here <https://tyeeptsa.org/>)

Contact pythonclub@tyeeptsa.org for additional information

Important Dates

- **Registration Opens: TODAY!!** (Wednesday, Sept 26) @ **8:00 p.m**
- **Registration Closes:** Oct 1st 23:59p.m or 50 students count
- **Registration Link:**
<https://tyepts.org/Packet/PythonBytesReg2024/SignInPacketPage/0>
- **First Day of Club: Oct 9th** 6:30 - 8:00 p.m

Contact pythonclub@tyepts.org for additional information