# Java Programming AP Edition

STUDY PLAN

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### Audience

People who want to learn or sharpening Java programing skills.

Student who are taking AP Computer Science class or exam. This course can be supplementary materials or review materials. It can also work as main course material to help school teachers.



# Overall Goal







# Start Early

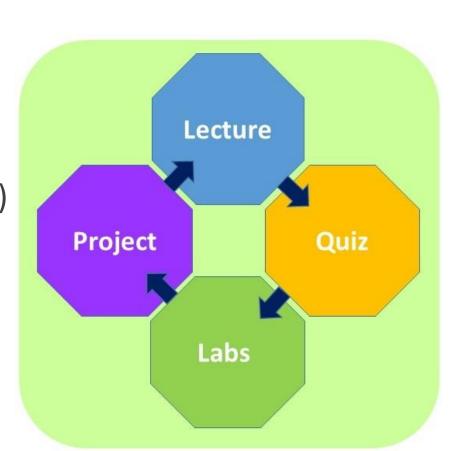
- (1) Start to Learn some Java from 7<sup>th</sup> grade to 9<sup>th</sup> grade (when you have at least some algebra 1 knowledge).
- (2) AP Computer Science is suitable for someone from 9<sup>th</sup> to 12<sup>th</sup> grade. (10 to 12 grade suggested).
- (3) Start AP CS course at least August of the year before test year. Finish part 1 before winter break.
- (4) Finish the whole course (Part 1 and Part 2) before March if possible.
- (5) Save at least 1 to 2 month for review.



### Course Structure

#### Download:

- (1) Lecture (with slide .pdf)
- (2) Document reading (if any) (Optional)
- (3) Quiz (Help to understand Java Syntax and basic skills)
- (4) Programming Exercise (Lecture/Section Labs)
- (5) Exam (Unit Review) (Optional)
- (6) Projects (Unit Review or Chapter Review)
- (7) AP Exam Preparation (Optional)



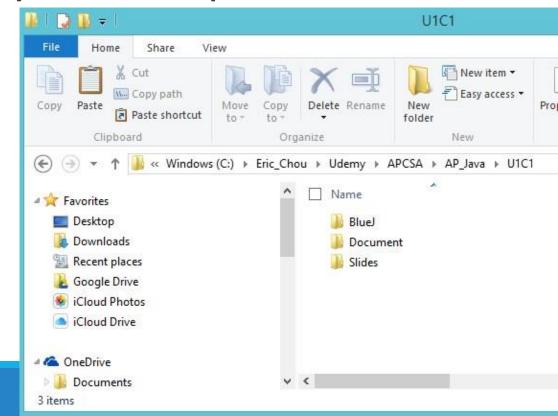


### Course Folder

Download AP\_Java.zip

Copy over to your own directory and unzip it. Store

your files and program into it.





### Demo:

- 1. Download files from Internet. (.pdf, .java, .zip)
- 2. Use *BlueJ* to start a project and run a program after download.
- 3. Lecture, Demo Program and Lab Projects.



## Quizzes and Exams.

- 1. Quiz and Multiple Choice Problems: Answer Provided
- 2. Free Response Problem. Check the sample answer programs. (After you finished your answers, check for yourself) Sorry, this is only line course. We do not support online checking of code yet.



# Programming Projects

- (1) Use series of program to allow student to develop programming skill from smaller pieces to larger pieces.
- (2) Unit one, we provide detailed guidelines and example to help student to develop their own programming skills.
- (3) Unit two, we provide pseudo code and general programming ideas.
- (4) Unit three, we start to use more un-guided projects to allow student to develop their own programming styles.

Sample answers will be provided for all projects and exams.