PYTHON GAME DEVELOPMENT

SJU ACM STUDENT CHAPTER
X
SJU GET CLUB





ABOUT PYGAME

WHAT IS PYGAME?

- PYGAME IS A FREE, OPEN-SOURCE LIBRARY THAT ALLOWS FOR THE DEVELOPMENT OF VIDEO GAMES USING PYTHON
- PYGAME OFFERS THE FOLLOWING FUNCTIONALITIES:
 - O GRAPHICS
 - SOUND
 - O INPUT
 - GAME DEVELOPMENT
- PYGAME IS BEGINNER FRIENDLY, BUT YOU CAN GET VERY ADVANCED WHEN IT COMES
 TO OVERALL GAME DESIGN AND DEVELOPMENT
- FOR MORE INFO ON WORKING WITH PYGAME, VISIT:

HTTPS://GITHUB.COM/PYGAME/PYGAME





GETTING ON TO REPL.IT

STEPS FOR CREATING YOUR FIRST PYGAME ON REPLIT

- 1) VISIT THE WEBSITE REPL.IT
- 2) SELECT EITHER LOGIN OR SIGN UP
 - LOGIN IF YOU HAVE AN ACCOUNT ALREADY
 - SIGN UP IF YOU ARE FIRST TIME USER (YOU CAN USE YOUR GOOGLE OR GITHUB ACCOUNT TO CREATE AN ACCOUNT)
- 3) ONCE ON THE HOME SCREEN, SELECT CREATE REPL
- 4) SEARCH PYTHON IN TEMPLATES
- 5) NAME YOUR REPL "SJUACMPYGAME"
- 6) FOLLOW ALONG WITH JAKE TO LEARN SOME PYTHON FUNDAMENTALS AND BUILD OUT YOUR PYGAME!



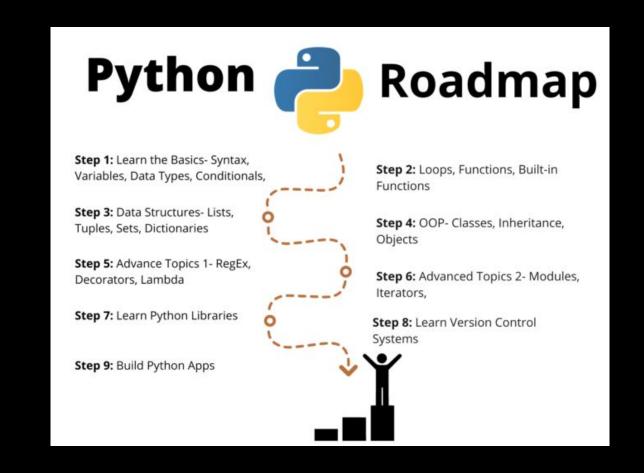
PYTHON BASICS

FUNDAMENTAL TOPICS WE WILL COVER

- VARIABLES
- LOOPS
- CONDITIONAL STATEMENTS
- LIBRARIES
- IF YOU WANT TO FOLLOW A STRUCTURE

 TO LEARN PYTHON MORE IN-DEPTH,

 CHECK THE IMAGE FOR GUIDANCE!





WHAT'S NEXT WITH PYGAME

WHAT CAN YOU DO NEXT WITH YOUR PYGAME?

- READ UP ON PYGAME DOCUMENTATION TO FIND OUT WHAT OTHER FEATURES AND FUNCTIONALITIES YOU CAN ADD To your game
- BE CREATIVE ADD WHATEVER YOU THINK WOULD MAKE THE GAME MORE FUN!
 - HERE'S SOME INSPIRATION:
 - STARTING SCREEN
 - IMPROVED VICTORY SCREEN
 - SOUND/VISUAL EFFECTS
 - NEW CHARACTERS
 - DIFFERENT ATTACKS
 - JUMP AND BLOCK



RESOURCES

WHAT IS PYGAME?

- PYGAME GITHUB: <u>HTTPS://GITHUB.COM/PYGAME/PYGAME</u>
- PYGAME WEBSITE: https://www.pygame.org/news
- DOCUMENTATION: https://www.pygame.org/docs/
- Introduction to Python and Pygame (Previous ACM Meeting)
- VIDEO GUIDES ON PYGAME:
 - THE ULTIMATE INTRODUCTION TO PYGAME
 - PYGAME IN 90 MINUTES FOR BEGINNERS
 - PYGAME PROGRAMMING TUTORIALS (PLAYLIST)



THANK YOU!