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**Course Title:** Python (Integrated with Django Web Framework)

**Duration:** Five (5) Days

Class Schedule: 9:00am to 5:00pm

**Total Hours:** 35 Hours.

**Course Description:** This course aims to teach basic and advanced

programming using Python. It will include basic game development and web development. Django is also included as part of a more advanced web development

using Python.

### **Course Contents:**

#### Day 1

- Setup, Intro to Python Programming
- Comments And Pound Characters, Numbers And Math, Variables And Names
- More Variables And Printing
- Strings And Text
- More Printing Examples, Asking Questions, Prompting People
- Parameters, Unpacking
- File Handling
- Functions

# Day 2

- Reading some code
- Boolean Practice
- What If, Else and If, Making Decisions
- Loops and Lists
- Branches and Functions
- Designing and Debugging
- Dictionaries
- Modules, Classes and Objects (OOP)
- Is-A, Has-A, Objects and Classes
- Inheritance and Composition

### Day 3

- Intro to Game Development using Python
- Creating Automated Tests
- Advanced user inputs
- Making sentences
- Creating your first website
- Getting input from a browser
- Starting your first Web Game
- Intro to Django Web Framework





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### Day 4

- Installing and Configuration
- Starting a new project
- Models
- Django Admin Interface
- URLs
- Views (Form-based and Class-based)
- Templates (HTML)
- Forms
- User Authentication

# Day 5

- Intro to Git and Github
- Using and reading third-party Django Apps
- Designing your Django website
- More exercises

# Reference:

- 1. Learn Python the Hard Way (HTML Version available at (<a href="http://learnpythonthehardway.org/book/">http://learnpythonthehardway.org/book/</a>)
- 2. Django Documentation (<a href="https://docs.djangoproject.com/en/1.4/contents/">https://docs.djangoproject.com/en/1.4/contents/</a>)

