Introduction to Python and Eclipse

Running Hello World Application in python via Eclipse IDE

Python is an open source programming language made to both look good and be easy to read, it is an interpreted language.

Eclipse is an integrated development environment (IDE) for developing applications.

In this tutorial we are trying to integrate programming language Python into Eclipse and Run Hello World Program.

Install Python

First python is needed to be installed in your computer, if it is already present then its good or else you can download from this link <u>https://www.python.org/downloads/</u>. (We are using Python 2.7)

Install Eclipse

Eclipse neon is recommended for integrating python in Eclipse. In order to install eclipse visit this site <u>https://www.eclipse.org/downloads/packages/eclipse-ide-eclipse-committers/neon3</u>.

Steps to install PyDev in Eclipse

1. Install new software in Eclipse. Help>Install New Software... An Available Software window will pop up.

🖨 Ec	lipse V	Vorkspace -	Java - Ec	lipse				
File	Edit	Navigate	Search	Project	Run	Window	Help	
i 📬 ·	• 📬	- 8 6	2 7	-	- 💁	- 🖄 🖶	3	Welcome
****							?	Help Contents
8							82	Search
								Show Contextual Help
8								Show Active Keybindings Ctrl+Shift+L
1								Tips and Tricks
								Cheat Sheets
							ay.	Perform Setup Tasks Install New Software
							<i>~</i>	Check for Updates
							\$	Install New Software
							1	Installation Details
							2	Eclipse Marketplace
							٢	About Eclipse





2. Type "http://pydev.sf.net/updates/" in text area of Work with and hit Enter.

3. Select PyDev from the list and click next twice.

-		
Install		— —
vailable Software		
Check the items that you wish to install.		
Vork with: http://pydev.sf.net/updates/		✓ <u>A</u> dd
	Find more software	by working with the <u>"Available Software Sites"</u> preferen
ype filter text		
Name	Version	
> 🔲 💷 PyDev Mylyn Integration (optional)		
Select All Decelect All 2 items selected		
Details		
Show only the latest versions of available software	Hide items that ar	e already installed
Group items by category	What is already inc	talled?
Show only software applicable to target environment		
Contact all update sites during install to find required software		
		\frown
?	< <u>B</u> ack	<u>N</u> ext > <u>F</u> inish Cancel
		\sim
🖨 Install		- D X
Astall Details		
Review the items to be installed.		
Name	Version	ld
🖗 PyDev for Eclipse	5.8.0.201706061859	org.python.pydev.feature.feature
> 🖗 PyDev for Eclipse Developer Resources	5.8.0.201706061859	org.python.pydev.feature.source.f
ze: Unknown		
Details		
		^
		v
	_	· · · ·
	< Back	Next > Finish Cancel





4. Read and accept the Agreement then click Finish.



5. PyDev will start to install. While installing a pop up window of Security Warning may ask for the authenticity click OK.



6. A pop up window of selection of certificates will pop select the given certificate and click OK.

Selection Needed X
Do you trust these certificates?
Brainwy Software; PyDev; Brainwy
Select All Deselect All
 Brainwy Software; PyDev; Brainwy Brainwy Software; PyDev; Brainwy
Details
? OK Cancel

Author : Rejo Varghese Date : August 07, 2017



7. After the selection of certificate a window will open asking to restart eclipse, click Yes.



Configuring PyDev

1. Open the preference window within Eclipse. Window > Preferences. Select Python Interpreter by Expanding PyDev> Interpreters.





Author : Rejo Varghese Date : August 07, 2017



2. Click on New... and enter interpreter name as Python27 and Browse the location in which you have installed the Python and select python.exe file (In normal case it will be present in C:\Program Files\Python27\python.exe).

Select interpreter		×
Enter the name and exe	cutable of your interpreter	
Interpreter Name:	Python27	
Interpreter Executable:	C:\Python27\python.exe	Brows <u>e</u>
	ОК	Cancel

3. After this a selection needed window will open by default everything will be selected if not select all and click OK. Also click Ok for the preferences window.





Author : Rejo Varghese Date : August 07, 2017

Hello World Program

1. Select PyDev project from File > New Project >Other >PyDev, Expand PyDev and Select PyDev Project and click Next. In PyDev Project Give a name for the Project for example org.ancit.PYExample and Hit Finish.



 Project name will be displayed in the Package Explorer of Eclipse. Right Click on your Project present in Package Explorer then select PyDev module from New > PyDev Module. Enter any name for the module for example <u>hello</u> and click Finish.

🔵 Ecl	ipse Workspace - PyDev - I	Eclip	se					
<u>F</u> ile	<u>E</u> dit <u>N</u> avigate Se <u>a</u> rch	Pro	ject Pydev <u>R</u> un <u>W</u> indow <u>H</u> elp					
1	🕆 🖬 🕼 🎯 🕷	F 🛨	O ▼ 9₄ ▼ @ // ▼ ½ ▼ 🖗 ▼ ♥ (> ▼ <> ·	-				
8	🛱 PyDev Package Explor	er 🛛	3 🕞 🔄 🧩 🔽 🗖					
	> 🍰 HelloPython	_						
	> 进 org.ancit.PYExami	ole						
	org.ancit.example		New		Project			
	> 🥔 org.ancit.tablevie		Go Into		File			
			Сору	(11)	Folder			
		Ē	Paste	œ	Link to Existing Source			
		×	Delete	æ	A Source Folder			×
			Move	P	PyDev Module		Consta a new Bathen module	
			Rename	#	PyDev Package	Create a new Python module		
		<u>_</u>	Remove from Context Ctrl+Alt+Shift+Down	-				
		è	Import	Other	Example			-
		2	Export		Other Ctrl+N	Source	Source Folder /org.ancit.PYExample Br	owse
			Refresh F5					
			Close Project				Package	owse
			Close Unrelated Projects					
			Run As	>	Nam	Name hello		
			Debug As					
			Validate					
			Restore from Local History					
			PyDev					
			Team					
			Compare With					
			Configure					
			Source				? Finish Can	cel
			Properties Alt+Enter					
		_						



3. A template window will open select template according to your need. In this case select Module Main and click OK.

0		×
Template		
<empty></empty>		
Module: CLI (argparse)		
Module: CLI (optparse)		
Module: Class		
Module: Main		
Module: Unittest		
Module: Unittest with setUp and tearDown		
Config available templates		
		_
OK	Cance	:

4. A Module named hello.py with main will open. Write the Following code in your module and save it.

if	name	== '^	nain	<u>'</u> :
	print	"Hello	Worl	d"

5. Now Run the code as Python Run. In menu bar select Run > Run As > Python Run. A window named save and launch may open select your module ex: hello.py and click Ok.





6. Hello World will get printed in the console.

Eclipse Workspace - PyDev - org.ancit.PYExample/hello.py - Ecli Eile Edit Source Refactoring Navigate Search Project	pse P <u>y</u> dev <u>R</u> un <u>W</u> indow <u>H</u> elp					-	٥	×	
📑 • 📷 • 🔚 👒 🗇 🐐 • 🗿 • 🏊 • 😥 🖋 • 🔮	▼ 刻 ▼ 🏷 🗘 ▼ 🗘 ▼				Quick Access] 🗄 🖬	\$1 ◆	2	•
Image: PyDev Package Explorer (2010) Image: Python Package Explorer (2010)	<pre> P hello 23 P hello 23 P ''' Created on 07-Aug-2017 d Gauthor: Rgig f main':</pre>							_	
Console 🖨	Console S <terminated> hello.py [C:\Python27\python.exe] Hello World</terminated>	Wash	land			₫ 및 ▼	•		
L		Writable	Insert	8:20				-	5

We have successfully printed Hello World in Eclipse Console via Python Language. Hope this tutorial was helpful.

ABOUT ANCIT:

ANCIT Consulting is an Eclipse Consulting Firm located in the "Silicon Valley of Outsourcing", Bangalore. Offers professional Eclipse Support and Training for various Eclipse based Frameworks including RCP, EMF, GEF, GMF. Contact us on annamalai@ancitconsulting.com to learn more about our services.

