Workshop on Environment setup for python and c++

# Time and Venue

Date: 25/11/21  
Time: 04:00 pm – 06:00 pm   
Venue: CompScE ‘94 Hall  
Batch: 1 (Third Years)  
Session: 1

# Speakers & Organizers

1. Livin Nector (Speaker)
2. Santhana Mikhail Antony (Speaker)
3. Ragupathi (Organizer)
4. Mohamed Faiyaz (Organizer)

# Aim

To motivate the student on setting up their own developments environments and to impart the knowledge of packages, environments, and package management systems for programming languages.

# Topics covered during the Session

1. Installing Visual Studio code
2. Getting familiar with VScode – Inbuilt - Explorer, Command Palette, Settings, Extensions, Inbuilt Terminal.
3. Installing MinGw using Msys2 in Windows for c++
4. C++ Integration with VScode.
5. I/O redirection and command line variables in c++
6. Installing Python (Normal Python installation)
7. Integrating python with VScode
8. Creating virtual environments using Venv environment manager
9. Installing modules using pip in virtual environments
10. Pip – a python package manager
11. Creating requirement.txt – reproducing environments
12. Managing virtual environments
13. Installing Anaconda
14. Creating conda environments
15. Installing packages using conda
16. Using Conda environments with VScode
17. Exporting conda environments to environment.yaml
18. Creating environments from environment.yaml

# During the Workshop

On the course of the workshop the installation steps and setup procedure were shown with the projector. The attendees were made to try out the same in their own systems at the time of the event. The problems in installation and setting up that raised due to different system configurations were discussed and rectified. Difference between different package and environment managers were discussed. The concepts of I/O redirection and command line variables were discussed. Different terminals in the windows were discussed. Environment variables and uses of path environment variable were discussed.

# Images taken at the event

A picture containing text, ceiling, indoor, wall

Description automatically generatedA group of people sitting in a room

Description automatically generatedA group of people sitting in a room

Description automatically generated with medium confidenceA group of people sitting in a room

Description automatically generatedA person giving a presentation to a group of people

Description automatically generated with medium confidenceA person giving a presentation to a group of people

Description automatically generated with medium confidenceA person standing in front of a screen with a person sitting at a desk in front of him

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