What you need to know about this course

The Games Camp introduces students to the basics of programming using Scratch & Unity3D. The focus of this short course is quick prototyping and execution of games for PCs. It aims to enhance logical thinking and problem solving skills through the exciting world of Games Development.
Topic 1

Basics of visual coding in Scratch:
In this workshop, students will be introduced to the basics of programming using Scratch, which is the simplified programming language that was developed by MIT. It’s a great way to learn and practice the skills required for future programmers and game developers. Scratch itself looks like a game where you can arrange and rearrange blocks to create a game of your own. The students will deliver a simple game that follows the same mechanics from the famous "crossy roads" game. This will be a good example to learn basic movement and input handling.

Topic 2

Scratch Space invaders:
In this workshop, students will learn more advanced topics about Scratch which in turn will enable them to create more complex and more enjoyable games. Implementing the shooting mechanic and a way to keep score will teach the students about variables and assets handling. Learning these advanced topics will also give them an idea about some more complex concepts in programming like cloning.

Topic 3

Meteoroids in Scratch:
In this workshop, the students will use cloning in multiple applications. This will be a good example to learn common programming techniques that resemble Object-oriented programming. This will increase their scope and enhance their logical thinking and problem-solving skills. This time, a more complex game will be made. "Meteoroids".

Topic 4

From scratch to Unity3d: Crossy Roads
In this workshop, students will start to convert their knowledge to the actual tool used by industry professionals in game development. Developing the same project they have worked on before but using C# programming language will enable them to relate the concepts to the more complex text-based coding. Introducing functions and variables and main control statements.

Topic 5

Unity3d First-Person Camera:
The project is going to be developed completely in Unity and it will have good examples and applications of the common programming techniques used in game development. The workshop will be more focused on the different features of Unity3d like terrain building, particle systems, physics and the instructor will make use of example assets from the standard assets to show the students what they can do.