SFML

To display our simulation of Starlings murmuration, we require very basic graphics - as simple as a window and 2d shapes changing position on the screen. For this minimal graphic requirement, we chose SFML library.  
**Simple and Fast Multimedia Library** (**SFML**) is a cross-platform software development library designed to provide a simple application programming interface (API) to various multimedia components in computers. It is composed of five modules: system, window, graphics, audio and network.

For our purpose we will require three out of these five modules:

**System Module:** It is thebase module of SFML, which defines various utilities. It provides vector classes, unicode strings and conversion functions, threads and mutexes, timing classes.

**Window Module:** Provides OpenGL-based windows, and abstractions for events and input handling.  
In our case we would require it to capture the event of mouse click.

**Graphics Module:** It is the 2D graphics modules used for displaying text, sprites and shapes. Here we will use it for displaying the starling objects as a particular shape.