This project aims to implement and design a simple jumping game, using VGA for graphical display and HEX displays for scoring. The player controls a character that jumps between the platforms with jump distance determined by how long the button is held. If the users successfully land on the platform earn points with additional points if they land on the center of the platform. Different sounds will be played for earn the point and fail the game.

As shown in Figure 1, the project will be divided into 5 parts, the jump input, the physical jumping logic, the VGA demonstration, the audio logic and the output.

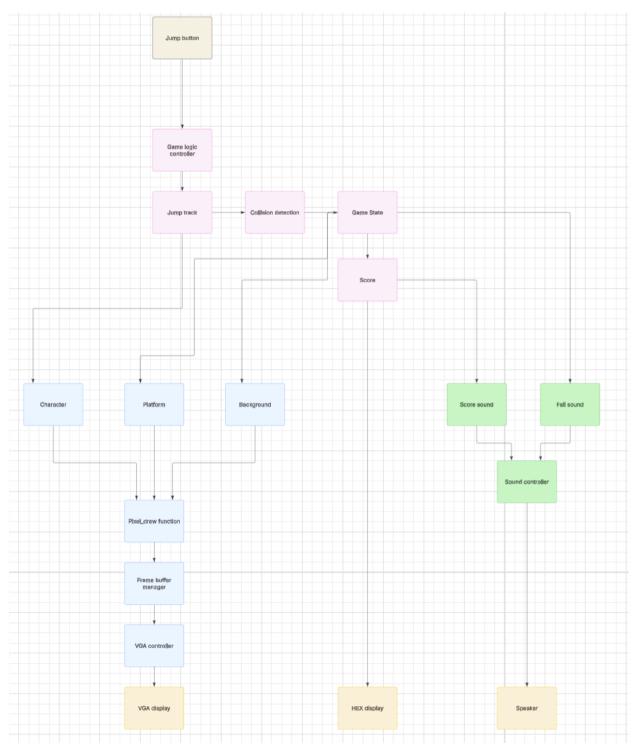


Figure 1. The block diagram of the jump game