In this project, the three extensions were developed. To begin with, the sound was added to jumping, collectible, plummeting, hit, and game-win. This did not generate any challenge. However, the enemies' extensions (which are arrows that "hit" a player) and the platform collision detection and evaluation (if it is in a platform) were quite challenging, as the player could collide with any of the objects, each having unique coordinates at a given frame. The enemies are arrows that hit the player and cause the player to lose a life and the platform enables the player to avoid falling.

Other aspects were quite challenging, in particular, code refactoring and organization after several updates of the project. In addition, the multiple-element interactions were quite challenging, especially the platform/plummeting interaction, as the player must not plummet if he/she is on a platform. I have learned a lot of skills in JavaScript, especially the factory pattern which I found quite interesting and useful, and how to encapsulate several interactions into properties (object state) that flag control variables (control variable of an array of objects, e.g., a hit has occurred)