

## Test Plan

Test Case type	Description	Test Step	Expected Output	Actual Output	Pass or Fail
Functionality	If the main menu accept user input correctly	Get into main menu, use direction key to navigate, use enter key to select	Direction key should move cursor between option, enter key should select current option	Direction key and function key are working properly	Pass
Functionality	If the game accept user input correctly	In any stage, use direction key to move charter, use Z key to shot, use Shift key to do accurate movement	Direction key should move charter, Z key should shot, Shift key should able to do accurate movement	All key are working properly	Pass
User interface	If Marisa in game image load correctly	In any stage, if main character show up correct image instate of a rectangle	Image show up correctly	Image show up correctly	Pass
User interface	If LittleDevil in game image load correctly	In stage2, if boss show up correct image instate of a rectangle	Image show up correctly	Image show up correctly	Pass
User interface	If Patchouli in game image load correctly	In stage3, if boss show up correct image instate of a rectangle	Image show up correctly	Image show up correctly	Pass
User interface	If LittleDevil plot image load correctly	At the beginning of stage2, if LittleDevil plot image show up correctly	Image show up correctly	Image show up correctly	Pass
User interface	If Patchouli plot image load correctly	At the beginning of stage3, if Patchouli plot image show up correctly	Image show up correctly	Image show up correctly	Pass
User interface	If all NormalEnemy in game image show up correctly	In stage1, if every enemies show up correct image instate of a rectangle	Image show up correctly	Image show up correctly	Pass
Functionality	If hit detection work properly	In any stage, if player bullet will hit enemy or enemy bullet will hit player	Bullet should affect both player and enemy, reduce their health value	Bullet do affect both player and enemy, reduce their health value	Pass
Functionality	If stage end detection work properly	Play through all stages	In any stage, if player have 0 or lower health, program should jump to main menu. If is the stage goal is achieved, program should jump to next stage. Except last stage, where program should also jump to main menu	Program do oriented properly	Pass
Functionality	If BGM for main menu play correctly	Go to main menu	Should hear BGM for main menu	Do hear BGM for main menu	Pass
Functionality	If BGM for stage1 play correctly	Play stage1	Should hear BGM for stage1	Do hear BGM for stage1	Pass
Functionality	If BGM for stage2 play correctly	Play stage2	Should hear BGM for stage2	Do hear BGM for stage2	Pass
Functionality	If BGM for stage3 play correctly	Play stage3	Should hear BGM for stage3	Do hear BGM for stage3	Pass

Test Case type	Description	Test Step	Expected Output	Actual Output	Pass or Fail