

Pseudocode / IPO Diagrams

Character movement

If UP ARROW key pressed, decrease CHARACTER position on Y axis

Input	Process	Output
Up arrow key	Move character up on Y axis	Character Y position

If DOWN ARROW key pressed, increase CHARACTER position on Y axis

Input	Process	Output
Down arrow key	Move character down on Y axis	Character Y position

If LEFT ARROW key pressed, decrease CHARACTER position on X axis

Input	Process	Output
Left arrow key	Move character left on X axis	Character X position

If RIGHT ARROW key pressed, increase CHARACTER position on X axis

Input	Process	Output
Right arrow key	Move character right on X axis	Character X position

Pick up items

If CHARACTER collides with TREASURE, increase SCORE

Input	Process	Output
Character X position Character Y position Treasure X position Treasure Y position Score	If character collides with treasure, increase the score by 20 points Score=Score+20	Score

If CHARACTER collides with KEY, pick up KEY

Input	Process	Output
Character X position Character Y position Key X position Key Y position Key_held=false	If character collides with key, pick up key	Remove Key Key_held=true

End Level

If CHARACTER collides with TRAPDOOR and CHARACTER holds KEY

Input	Process	Output
Character X position Character Y position Trapdoor X position Trapdoor Y position Key_held=true	If character collides with trapdoor and holds key, go to next level.	Display next level screen.

If TIMER reaches zero, end game

Input	Process	Output
Time	If time reaches zero, end the game. If time=<0	Display Game Over screen.