Manual

Development

* User Interface
* Mage Hunter Font used for the letter and different colors.
* Buttons made which are clickable by mouse.
* On Click sound added to the buttons.
* Background sound added to the UI part also.
* Start menu has options-Play, Options which goes to map scene, Quit.
* Pause screen on pressing Esc. This feature enable us to pause the game on the same screen without going to new screen and pause can be seen behind.
* Pause menu has options- Resume, Options which goes to map scene, Main menu.
* By pressing Esc again, the game resume at the same state.
* Level Select Map has Keyboard controlled interface with options to choose any of the 4 levels.
* Map has lock feature in which except 1 other levels remain locked, until you complete the previous level.
* Reset feature is also added as if you want to start from beginning again which will relock all levels.
* Game over menu is displayed when the player loses all its 3 lives. This screen shows the score till that point.
* Game over screen has options- Play again, Options which goes to map scene, Quit.
* Game finished window comes when you complete the game successfully.
* It will display your score, remaining lives, Bonus score and total score. Bonus score based on the lives remaining is added.
* It will have options - Play again, Options which goes to map scene, Quit.
* Health Bar is added which has dynamic color transition.
* Health increases to full when you complete level.
* Health decreases when you get hurt and Health bar changes it color along with value.
* Score Bar also added which displays your current score during the game.
* Lives remaining is also displayed during the playtime.
* Different sounds added to each level which plays during the whole playtime.
* Sounds for bounty collection, Jumping, Attacking , Getting hurt, Pause menu, Button selection, Knife, dying is added.
* Player
* Ninja sprites used to show the player.
* Player can move right and left with a finite speed.
* Animation added for moving while the player moves which has a defined loop time and animation is trigger till the player moves.
* Player can jump from ground.
* Animation added for jumping in 2 parts, while player is on ground-Take on animation added and in air- Landing animation is added which runs once till it reaches ground.
* Knife object is added which is thrown by player, when it collide with enemy, enemy gets hurt and even player can also get hurt by enemy’s knife.
* Knife’s are unlimited and are destroyed after thrown so does not create space.
* Animation is added along with a throw point from where player releases the knife.
* Time duration is set for destroying knife so that it does not hurt any other object.
* Sword attack is added to the player with sword collider. Player can hurt enemy by attacking with sword also get hurt himself.
* Sword collider to the sword, so when it hurts enemy, enemy hurt sounds and sword sound are triggered simultaneously.
* Animation is also added along with pivot point so player do not displace after attacking.
* IMMORTALITY is added to the player- when someone attacks player, player becomes immortal for few seconds which is shown by blinking. In that time all attacks on player are useless.
* Player can take fruits and increase score.
* Respawning added to player- When player’s health becomes zero or it falls into sea. Player reborn and start game again from the starting position.
* Life added to the player- Player can only respawn a finite number of times.
* Health added to the player which decreases when hurt. Player can get hurt by 2 events- Attacked by knife or by sword.
* Player has the functionality to throw the weapon in the air also.
* Player can also climb on the slopes by running or jumping only.
* Enemy
* Ninja girl sprites used to show the player.
* Enemy can move right and left with a finite speed.
* Animation added for moving while the enemy moves which has a defined loop time and animation is trigger till the enemy moves.
* Knife object is added which is thrown by enemy. When it collide with player, player gets hurt and even enemy can also get hurt by enemy’s knife.
* Knife’s are unlimited and are destroyed after thrown so does not create space.
* Animation is added along with a throw point from where enemy releases the knife.
* Time duration is set for destroying knife so that it does not hurt any other object.
* Sword attack is added to enemy with sword collider. Enemy can hurt player by attacking with sword also get hurt itself.
* Sword collider to the sword, so when it hurts player, player hurt sounds and sword sound are triggered simultaneously.
* Animation is also added along with pivot point so enemy do not displace after attacking.
* Health added to the enemy which decreases when hurt. Enemy can get hurt by 2 events- Attacked by knife or by sword.
* Enemy can also climb on the slopes by running or jumping only.>
* Enemy states and AI
* Artificial intelligence added to all enemies.
* States added to the enemy which define state of the enemy at a particular time.
* Enemy can enter any state on trigger and exit also.
* All enemies go into different state at a time which implies randomized moment of each enemy and different from other enemies.
* Randomization is done by setting in state time with random time generator.
* Idle State- Enemy remain in the idle state waiting for some moments of player which is some period of time not known. After exiting it enters patrol state.
* Patrol State- In patrol state enemy moves from one edge to other edge of the platform which can be adjusted for a time not known.
* Ranged State- Enemy enters this state when it sees the player. Enemy can also recognize player moments without even seeing him as in case when player is behind enemy. When player comes closer even when player is in back, enemy turn back and start throwing knives on the player.
* Also in the case when it sees player from a distance, it stops all movements and start throwing knives on the player.
* Melee State-Enemy when come closer to the player, it starts attacking the player with sword and directly enters melee state.
* Follow- Enemy also follows the player while throwing the knives. Just when enemy faces player it enters Ranged state and throws knives along with following the player, if player tries to run.
* Environment
* 4 levels created with all different themes.
* Level 1 is valley theme, Level 2 with underwater theme, Level 3 with Sky theme and Level 4 with Theme City.
* Tiles in all levels containing grassy grounds, marble grounds, rocky grounds, trees, sea, grass, mountains.
* Moving platforms are made which can move both vertically and horizontally, and also have the option to move diagonally.
* Moving platforms have a definite speed which varies at many places.
* Fruits of 3 types- Banana, Apple, Strawberry are placed as points of weight 25, 50, 75.
* Fruits are placed with some patterns in all 4 levels and strawberry at difficult points only.
* Enemies are placed at the platforms which are not moving with EDGES known to the enemy so that it does not fall from platform while patrolling.
* End points are shown with a sign board which takes you to the next level.
* Platforms have the feature that you can jump on it from above as well as below.

Design Patterns Used

* Singleton: Player class has only one instance which is the main player and we are not destroying it even after it dies.
* Object pool: Knife has an object pool, whenever player or enemy attack a knife, it ask the class to create an object and it destroys it after a time.

Attributions

Special thanks to:

* Unity3d.com for community version of IDE to make game and providing tutorials and blog for all doubts.
* For player , enemy, UI sprites –gameart2D.com
* For background tiles , background of all levels , fruits ,buttons sprites –opengameart.org
* For learning tutorials from YouTube:

[Youtube.com/user/gamesplusjames](https://www.youtube.com/user/gamesplusjames)

[Youtube.com/inScopeStudios](https://youtube.com/inScopeStudios)

[Youtube.com/user/VeeBeeMeeGames](https://www.youtube.com/user/VeeBeeMeeGames)

* For background sounds: [http://www.soundimage.org](http://www.soundimage.org/)

Triumph of technology, Friendly machine, Future business, Future grid, industries in orbit, self-destruct sequence-Eric Matyas

* For sound effects: [http://soundbible.com](http://soundbible.com/)
* Tool for sound effect: [http://www.bfxr.net](http://www.bfxr.net/)
* For Magehunter font : 1001freefonts.com
* For learning basic C# : Tutorials point.

User Manual

Description

You are a ninja.

Fast paced, challenging with ninja powers.

You control a ninja player which can run fast, jump high standing on ground, kill enemies with his sword, and Hurt enemies by throwing knife. Your goal is to survive as long as possible by killing all the enemies or douching them and finishing all the stages so to complete the game.

Things get more difficult as time passes and your health and lives decrease.

Features a lot of fun and challenging situations.

Play the game COMBAT NINJA and submit your highest score by taking bounties coming up in the way.

Installation

Simply extract the game from the repository in a folder.  
Open the folder combat ninja.

Run the application combat\_ninja.exe.

How To Play

**In the menu**

* Start menu has options Play- Game runs from level 1.
* User Interface for start menu, pause menu, game over and game finish menu are controlled by mouse.
* Buttons are clicked by mouse.
* Options –Takes you to level selection map where you can select your level with keyboard.
* Level select Map: Left and Right arrow for direction

Space bar for selecting a level.

Reset for locking all the levels except 1st .

* Buttons: Play for starting from level 1

Options for going to Map window.

Quit for exiting the game

Mai menu for going to the Start menu

Resume for unpausing the running game.

**Player Control**

* Movement-Left and Right arrow for movement in Left and Right direction.
* Space bar for jumping while player is on ground.
* Z for attacking with sword on enemy.
* X for throwing the knife either on ground or air.
* Esc for going to the pause menu screen and unpausing.
* W for going from one level to another.

**Requirement**

This is the windows version of the game, so your PC should have windows operating system.

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