

This is a quick reference guide for sample code you can use for your game.
Look through these to hopefully find the help you require.

Pygame Appendices

These are appendices for pygame we've used before (plus a couple of new ones).

[Appendix 1 - Pygame Events](#)

[Appendix 2 - Mouse Events](#)

[Appendix 3 - Key Events](#)

[Appendix 4 - Images Sounds and Text](#)

[Appendix 5 - Collision Detection](#) *new* - used in hit boxes below

[Appendix 6 - Custom Fonts](#) *new* - written by a former student

Example Game Code Reference

Creating a Menu

- Using states to control movement through a menu system
- Use of pygame.Rect which allows collision of a mouse with a rectangle

Code: [sampleMenu.py](#)

Video: [Video #1 - Making a Menu](#)

Centering Text in a Box

- How to get the dimensions of a text given a font
- Use it to center the text in a box

Code: [sampleMenu.py](#)

Video: [Video #2 - Adding Title to the Menu](#)

Scrolling Backgrounds

- Scroll a background from left to right
- Choosing a background that won't have a split

Code: [scrollingBackwards.py](#)

Video: [Video Scrolling Backwards](#)

Download File: [gamebackground2.jpg](#)

CharacterMovement

- Automatic movement by a character from left to right
- Scaling the character as it moves, growing from small to large
- Creating a character hitbox (used in future programs)

Code: [characterMovement.py](#)

Video: [Character Movement](#)

Download Files: [gamebackground2.jpg](#), [Michellin Man.png](#)

In Game Timers

- Setting an automatic shooter
- Set a timer to shoot 1 second after the missile gets off the screen

Code: [UsingTimer.py](#)

Video: [Using a Timer](#)

Missiles into a List

- All missiles are now in a list
- Using a timer to add missiles to a list
- How to delete from the list without crashing

Code: [MultipleMissiles.py](#)

Video: [Missiles into a List](#)

Character Movement and HitBoxes

- How to use the keyboard to move characters
- Continuous movement for characters
- Collision using rects
- More hitboxes, better the collision
- Rect.colliderect vs Rect.collidelist

Code: [Keyboard Movement.py](#)

Video: [Movement and Hitboxes](#)

Download File: [spaceship.gif](#)

Jumping Character

- Uses keyboard movement
- Use of booleans to toggle jumping on and off

Code: [JumpingCharacter.py](#)

Video: [Jumping Character](#)

Van Rooyen Makes a Game:

- 9 videos from Mr. Van Rooyen as he makes a game
- Sorry, the game was never finished, but you can get a good idea of thought process, etc...

[Video #1 - Making a Menu](#)

[Video #2 - Adding Title to the Menu](#)

[Video #3 - Scoreboard and Character Following Mouse](#)

[Video #4 - Change Speed and Back Button](#)

[Video #5 - Character Animation](#)

[Video #6 - Restricting Movement Through Barriers](#)

[Video #7 - Adding Stamina](#)

[Video #8 - Stamina Bar](#)

[Video #9 - Better Change of Direction](#)