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| --- | --- | --- | --- |
| Milestone | Skill inventory | Status | Commit ID |
| Milestone 1 | Skill inventory 1 | Completed | 93db43e1d9a2e98d07b9430be3bfdffcb4caf6ad |
| Milestone 1 | Skill inventory 2 | Completed | 932feb65aaa3ac2111a405fdeee37d6e145842ac |
| Milestone 1 | Skill inventory 3 | Completed | 93db43e1d9a2e98d07b9430be3bfdffcb4caf6ad |
| Milestone 1 | Skill inventory 4 | Completed | abe4f941f1cf49f0a68dd7a293fcb398a056d94d |
| Milestone 1 | Skill inventory 5 | Completed | 22e20a0546b968e7569ef38d650597a8868e3d90 |
| Milestone 4 | Skill inventory 6 | Completed | d2b690e57fccb5b5fce9ed6cdd285fad8324e884 |
| Milestone 1 | Skill inventory 7 | Completed | 284644ff1c6cddfd49653cbadf961f3d86e1565e |
| Milestone 1 | Skill inventory 8 | Completed | 970d4ce62120562ddb15b75e36b945bf460710dc |
| Milestone 1 | Skill inventory 9 | Completed | 8fe313b190504d7660bf742ed9011276ca290f01 |
| Milestone 1 | Skill inventory 10 | Completed | 970d4ce62120562ddb15b75e36b945bf460710dc |
| Milestone 1 | Skill inventory 11 | Completed | 8fe313b190504d7660bf742ed9011276ca290f01 |
| Milestone 1 | Skill inventory 12 | Completed | 8fe313b190504d7660bf742ed9011276ca290f01 |
| Milestone 1 | Skill inventory 13 | Completed | 595535f3bbee1179024ab3b8cdd97363d77bf386 |
| Milestone 1 | Skill inventory 14 | Completed | 595535f3bbee1179024ab3b8cdd97363d77bf386 |
| Milestone 1 | Skill inventory 15 | Completed | 9de3b89eccf88389408b25d7dbc0ac1977113c02 |
| Milestone 2 | Skill inventory 16 | Completed | 133137432abf8ca83e7e5a2469473e9a57ffca27 |
| Milestone 4 | Skill inventory 17 | Completed | 133137432abf8ca83e7e5a2469473e9a57ffca27 |
| Milestone 4 | Skill inventory 18 | Completed | 9de3b89eccf88389408b25d7dbc0ac1977113c02 |
| Milestone 2 | Skill inventory 19 | Completed | 471abec7371cfdd36edcb6c8c002725f5a8f862b |
| Milestone 2 | Skill inventory 20 | Completed | 970d4ce62120562ddb15b75e36b945bf460710dc |
| Milestone 2 | Skill inventory 21 | Completed | 595535f3bbee1179024ab3b8cdd97363d77bf386 |
| Milestone 2 | Skill inventory 22 | Completed | 8f71e164e676a1affacffd31f2344c807d9e25b0 |
| Milestone 4 | Skill inventory 23 | Completed | 2bcfcc1136fbd5d9154150d189f6f9574049a538 |
| Milestone 4 | Skill inventory 24 | Completed | 8fe313b190504d7660bf742ed9011276ca290f01 |
| Milestone 2 | Skill inventory 25 | Completed | 471abec7371cfdd36edcb6c8c002725f5a8f862b |
| Milestone 2 | Skill inventory 26 | Completed | 471abec7371cfdd36edcb6c8c002725f5a8f862b |
| Milestone 2 | Skill inventory 27 | Completed | 471abec7371cfdd36edcb6c8c002725f5a8f862b |
| Milestone 2 | Skill inventory 28 | Completed | 284644ff1c6cddfd49653cbadf961f3d86e1565e |
| Milestone 2 | Skill inventory 29 | Completed | 133137432abf8ca83e7e5a2469473e9a57ffca27 |
| Milestone 2 | Skill inventory 30 | Completed | 133137432abf8ca83e7e5a2469473e9a57ffca27 |
| Milestone 3 | Skill inventory 31 | Completed | ed89d62efc8c9f2667642a58a99683c4edb012fc |
| Milestone 3 | Skill inventory 32 | Completed | ed89d62efc8c9f2667642a58a99683c4edb012fc |
| Milestone 4 | Skill inventory 33 | Completed | 133137432abf8ca83e7e5a2469473e9a57ffca27 |
| Milestone 3 | Skill inventory 34 | Completed | 9de3b89eccf88389408b25d7dbc0ac1977113c02 |
| Milestone 4 | Skill inventory 35 | Completed | 5bdf57222d492535b7db763350522eb2745f953c |
| Milestone 4 | Skill inventory 36 | Completed | 8f71e164e676a1affacffd31f2344c807d9e25b0 |
| Milestone 3 | Skill inventory 37 | Completed | ed89d62efc8c9f2667642a58a99683c4edb012fc |
| Milestone 3 | Skill inventory 38 | Completed | 9de3b89eccf88389408b25d7dbc0ac1977113c02 |
| Milestone 3 | Skill inventory 39 | Completed | 970d4ce62120562ddb15b75e36b945bf460710dc |
| Milestone 3 | Skill inventory 40 | Completed | 5bdf57222d492535b7db763350522eb2745f953c |
| Milestone 3 | Skill inventory 41 | Completed | feb9cf0bde3cb3bded76034b7c089a64eb67ec49 |
| Milestone 3 | Skill inventory 42 | Completed | ed89d62efc8c9f2667642a58a99683c4edb012fc |
| Milestone 4 | Skill inventory 43 | Completed | 133137432abf8ca83e7e5a2469473e9a57ffca27 |

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| Milestone 1 | Milestone 2 | Milestone 3 | Milestone 4 | EXTRAS (IF ENOUGH TIME) |
| Player controller | Enemies | Shooting | Start and end screen | Player sprite |
| Scenario | Follower | Health system |  | Sound effects |
| Smoke mechanic |  | Score system |  | Music |
|  |  |  |  | Animations |
|  |  |  |  | Scrolling screen |

Milestone 1

* Skill inventory 1: line, ellipse, rect, triangle, quad, arc, curve.
* Skill inventory 2: fill, stroke, strokeWeight, noFill, noStroke, color.
* Skill inventory 3: Modes: CORNER, CORNERS, CENTER, RADIUS.
* Skill inventory 4: setup(), draw()
* Skill inventory 5: background(), random(), noise()
* Skill inventory 7: keyPressed(), keyReleased(), keyPressed, mousePressed(), mousePressed.
* Skill inventory 8: increment operators: ++, +=, --, -=, \*=, /=
* Skill inventory 9: declare and use a local variable
* Skill inventory 10: declare and use a global variable.
* Skill inventory 11: println().
* Skill inventory 12: conditional statements.
* Skill inventory 13 boolean expressions.
* Skill inventory 14: logical operators.
* Skill inventory 15 switch statement

Milestone 2

* Skill inventory 16: loop
* Skill inventory 19
* Skill inventory 20: Declare & call a function with no parameters and no return type.
* Skill inventory 21: Declare & call a function with a return type.
* Skill inventory 22: What’s the difference between parameters and arguments?
* Skill inventory 25:
* Skill inventory 26
* Skill inventory 27
* Skill inventory 28: Write a class with a constructor function.
* Skill inventory 29: Use the keyword new to instantiate an object.
* Skill inventory 30: Write a constructor function with parameters.

Milestone 3

* Skill inventory 31:
* Skill inventory 32
* Skill inventory 34: Initialize and populate an ArrayList.
* Skill inventory 37:
* Skill inventory 38: Use the PVector class
* Skill inventory 39: Do some basic physics: use position, velocity, and acceleration (due to gravity) vectors
* Skill inventory 40: Find the direction and distance between two points
* Skill inventory 41: Create a random 2D vector
* Skill inventory 42
* Skill inventory 43: Using the Processing documentation look up a method in the PVector class that’s new to you and use it in your code

Milestone 4

* Skill inventory 6: constrain(), dist()
* Skill inventory 17: A nested loop.
* Skill inventory 18: break()
* Skill inventory 23: Pass by copy (value): declare and use a function that takes int, float, char, etc as an argument
* Skill inventory 24: Pass by reference (objects): declare and use a function that takes an object as an argument
* Skill inventory 36: Use an ArrayList method: size(), get(), remove(), contains()
* Skill inventory 33: Initialize and populate an array.
* Skill inventory 35: Manage a set of objects with an array or ArrayList