

This file must be submitted online *before* the beginning of class in order to receive credit.

1. Create a script called `avatar.py`. Within this file, perform the following operations:
  - (a) Create a class called `Avatar`. The `Avatar` class's initializer should take in a `name`, `surface`, and `position` (as a Python tuple). The class should also have a default initial `velocity` of  $\begin{bmatrix} 0 \\ 0 \end{bmatrix}$  (as a `numpy` array). While the initializer for the `Avatar` should accept a Python tuple as its argument for `position`, internally it should store it as a `numpy` array. That is, one should be available to initialize the `Avatar` as:

```
boy_image = pygame.image.load('Character Boy.png')
boy = Avatar('Boy', boy_image, (50,50))
print boy.position # Should be a numpy array.
```
  - (b) Add a method called `update(self, acceleration, time)`. `Acceleration` will be provided to you as a `numpy` array. The `update` method should update `self.position` and `self.velocity` using the Newton-Euler-1 integration update (see p. 47 of the AI book, or your class notes).
2. Submit the file `avatar.py`.