Gravitational N-body Problem

Kamalesh Paluru Omer Sipra

 $March\ 25,\ 2023$

Interim Report

Classical 2-body Problem

We decided to start with the most basic case: The classical 2-body problem. Once we have the necessary classes, we can make them more general to support more complicated systems. The two base classes are Body and System:

- Body: This class represents a body in our N-body system.
- System: This class takes a list of Body objects and contains methods to modify an instance of the system (and the bodies in it).

•