Waterfall – Antikythera

1. *Requirement definition*: (Total Estimated time of completion – 14 weeks)
   1. Calculate the positioning of stars/planets/etc. (main program with calculation methods)
      1. Find formulas from Antikythera research
   2. Database with the different celestial bodies and their related info
      1. Comets/meteor showers, planets, stars, misc.
   3. User will interact with program in some way to calculate positioning/date/etc. of a desired celestial body
      1. GUI will have some way of giving options for the user to choose what they want to see about a certain celestial body
2. *System and software design*:
   1. User Interface
      1. GUI (Visual studio)
         1. Icon and background image related to space
   2. Database (estimated time of completion – 3-4 weeks)
      1. Each relation will have different attributes
         1. Multiple tables for the different celestial bodies (listed attributes)
            1. Stars

Attributes: name, distance our solar system, location

* + - * 1. Planets

Attributes: name, orbit period, orbit speed, distance from the sun, mass, and planet type

* + - * 1. Celestial events

Attributes: name, type, date, location

* + - * 1. eclipses

attributes: date of event, type of eclipse, and locations they occurred.

* 1. Main code (methods/variables/etc.)

1. *Implementation and unit testing*:
2. *Integration and system testing*:
3. *Operation and maintenance*: