

Project 6

Status Summary (15 points) Include these sections in your status update PDF labeled "Project 6 Update.pdf": • Please include the names of all team members and the title of the project in the PDF! • Work Done: Written description of the work done in the first week of your project and (in the case of multi-person teams) the breakdown of work across team members. • Changes or Issues Encountered: Has anything changed so far in your approach to the project from the initial design in Project 5? • Patterns: Now that you have more of your system implemented, please describe the use of design patterns so far in your prototype and how they are helping you or your design.

Members: Ben Weiler and Sean Fitze.

Ben Weiler work:

Initial implementation of the factory, strategy and decorator pattern within a dotnet framework. These will all work together to build objects and decorate them with colors and their animations. Within unity, I was able to capture FFT data from a song and display 512 frequency bands and was able to compile them into 4 displayed vectors.

Sean Fitze work:

Worked on the MVC pattern that reads and gathers data from excel files on high, mid, and low ranges from stored FFT data that is inputted. The view for now is used to print out that data but will be used in the future to send to the factory methods to create objects in Unity

Changes and Issues encountered:

Some slight modifications were added to the MVC during implementation of the pattern including adding observer and strategy methods as well as another observer class..

Patterns:

We used observer methods in the model class to keep track of state changes in the model and to keep it independent from the view and controller.

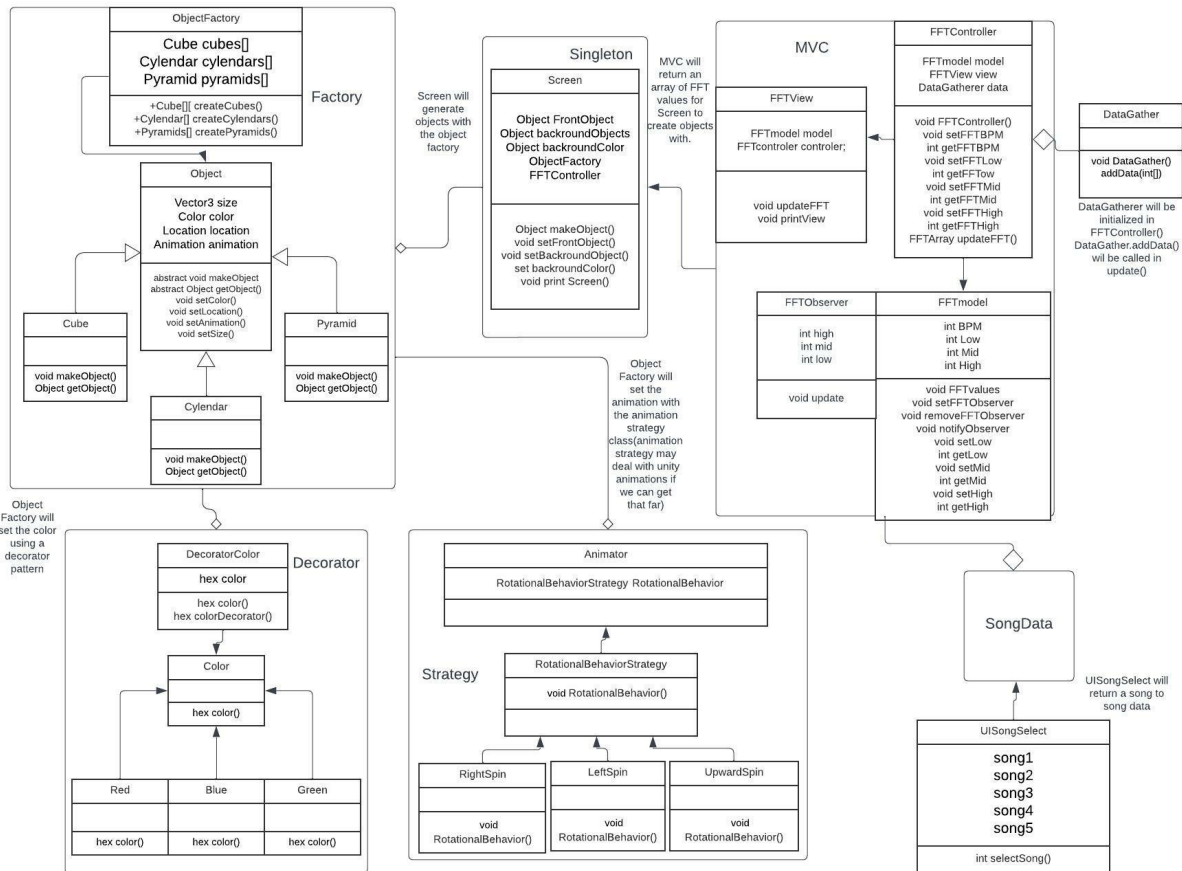
MVC pattern for FFT data makes it easy to organize that data and send it to other objects.

Decorator pattern for colors which makes it easy to modify object colors.

Factory for shapes making it easy to create different types of objects.

Strategy for animation making it easy to set different animation algorithms to objects.

Class Diagram (10 points)



Plan for Next Iteration (10 points):

Next iteration, we will focus on implementing our text-based solution into a full unity demo. Our final solution is still dependent on how comfortable we become with using design patterns within unity but the final product may become a complicated version of our text-based solution with different song sections.