

# Programming Project Report

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**Academic Integrity Statement:** I pledge that I have neither given nor received unauthorized help on this programming assignment.

## Problem Statement:

The goals of the assignment were to create an array of objects and display their contents. The program inputs are mainly the menu choices, and then the attributes of each pinball object if you're creating a new one. The output is a list of the different pinball machines. I had to make sure that the user didn't put in a menu choice not given and make sure that the year produced was a reasonable number.

## Design:

I followed a lot of previous code from PF1, and worked on Pinball.cpp first. I found it easier to create another file to handle the data from Pinball.cpp, and I called it PinballTwo.cpp. This made it easier for me to work with the objects, but it's probably not the best thing to have another file, but it worked so.

## Implementation:

I started with code from PF1, and I used the goals given to make a cout statements and I prioritized the loading and print functions first. I adapted it by making sure the variables would work with the code, and making sure I used previous PF1 homework's as a reference and not just to mindlessly type, because there was some differences in adaptability. I worked on Pinball.cpp first, then a little bit of main.cpp, and then PinballTwo.cpp and main after that.

**Testing:**

I tested it by making sure the load functions worked by working on the prints first. I worked and made sure that the normal years worked first, and then I made sure that you couldn't put in a negative value for that or the fun rating. Everything worked as expected.

Welcome!

1: Load machines from an ASCII file.

2: Insert a new machine.

3: Print machines from a given year.

4: Print information for all machines.

5: Exit program.

OUTPUT:

Enter menu selection: 1

Welcome!

1: Load machines from an ASCII file.

2: Insert a new machine.

3: Print machines from a given year.

4: Print information for all machines.

5: Exit program.

Enter menu selection:

INPUT:

4

OUTPUT:

Machines

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Machine Name: Medieval Madness

Manufacturer: Williams

Theme: fantasy, medieval, wizards/magic

Year Produced: 1997

Fun Rating: 8.3

Machine Name: Black Knight 2000

Manufacturer: Williams

Theme: Historical - knights

Year Produced: 1989

Fun Rating: 7.9

Machine Name: The Addams Family

Manufacturer: Bally

Theme: Celebrities, fictional, licensed theme

Year Produced: 1992

Fun Rating: 8.2

Welcome!

- 1: Load machines from an ASCII file.
- 2: Insert a new machine.
- 3: Print machines from a given year.
- 4: Print information for all machines.
- 5: Exit program.

INPUT:

Enter menu selection: 5

### **Conclusions:**

The result of this assignment was I was able to create a program that can take in and create an array of objects and display them. Yes, the project was a success. I would do it the same next time, but instead, try to make it to where it worked with just one Pinball.cpp file. The project took 2 hours-ish to complete.