CS 372
Assignment # 1

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I. Description

In C/C++ write a program that prompts a user to provide two Pokemon types (first gen only). The first type should be the attacking type and the second type should be the defending type. The program should return ”super effective”, ”not very effective”, ”no effect” or ”no type advantage”.

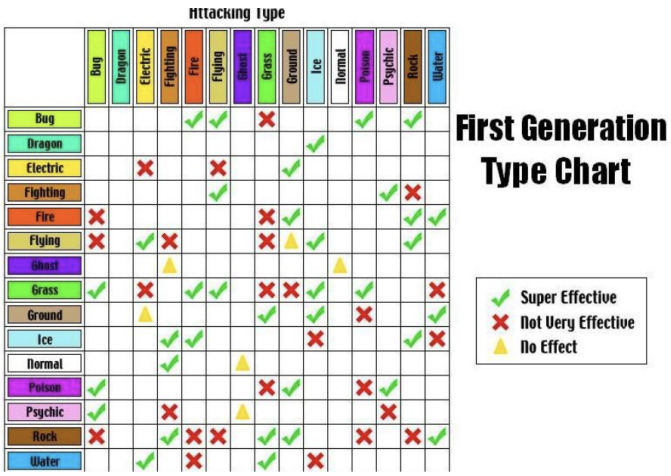

Fig. 1.

II. User Interaction

If the program has run successfully, the user will receive the message “Please enter the type of combat that you want:” as shown in Fig. 2

```
Please enter the type of combat that you want:
1.Attacking type
2.Defending type
```

Fig. 2.

And then the user can make their own choice to next step by following the letter shown.

APPENDIX C
CODE WRITE-UP (WRITING ABOUT WRITING CODE)

The idea of this Pokemon Battle Simulator is to first create three integer variable which defines the type of combat genre, the type of Pokemon that user want to choose, and the type of Pokemon that user want to fight with.

```
int chooseType(int &a);
int choosePokeType(int &b);
int choosePickType(int &c);
```

Fig. 6. Screen shot 1

And then pass these variables into the function. This process is to let the user define the variables' value.

```
    chooseType(Type);
    choosePokeType(pokeType);
    choosePickType(pickType);
```

Fig. 7. Screen shot 2

At last, the program use a if-else-if statement to screen out the different combination and then print out the result.

```
    if (pokeType==1&&pickType==8) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }
    else if (pokeType==1&&pickType==12) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }else if (pokeType==1&&pickType==13) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }else if (pokeType==3&&pickType==6) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }else if (pokeType==3&&pickType==15) {
        for (int i=0; i<=100; i++) {
```

Fig. 8. Screen shot 3

CS 372
Assignment # 3

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I. Sequence Diagram

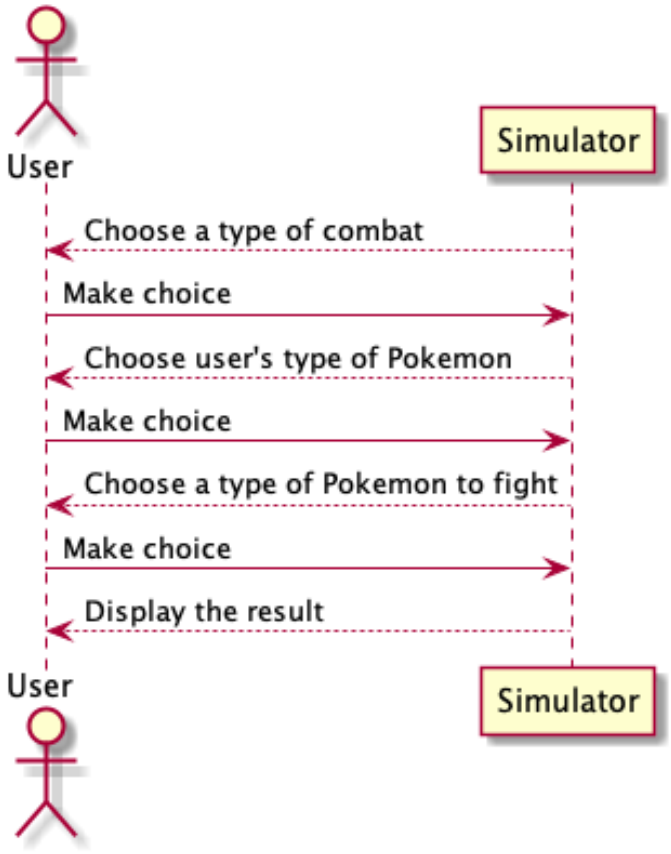

Fig. 1.

II. Class Diagram

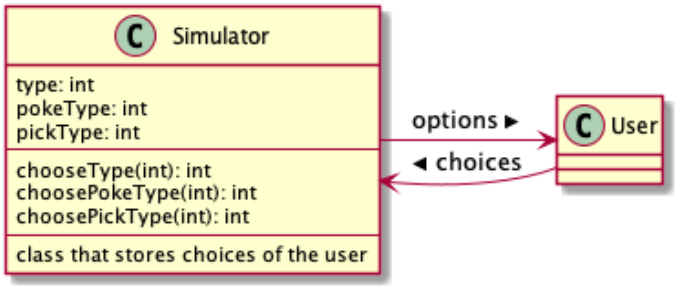

Fig. 2.

III. Use Case Diagram

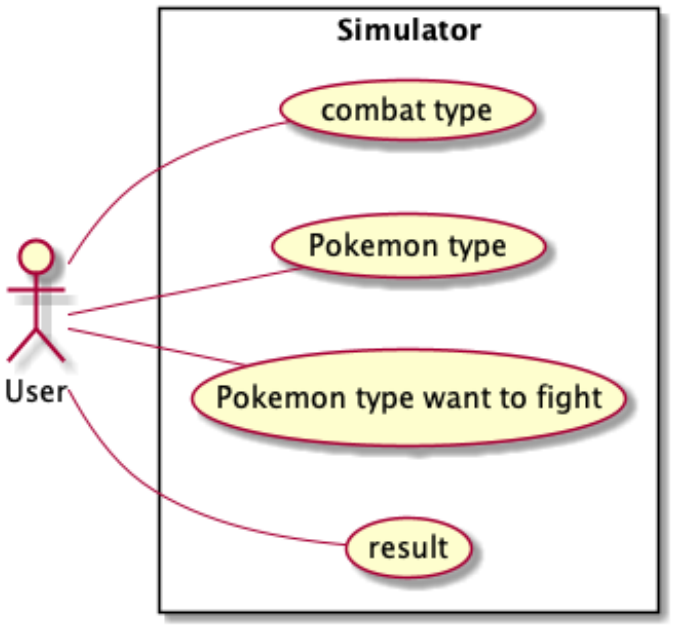

Fig. 3.

APPENDIX D
CODE WRITE-UP

The idea of this Pokemon Battle Simulator is to first create three integer variable which defines the type of combat genre, the type of Pokemon that user want to choose, and the type of Pokemon that user want to fight with.

```
int chooseType(int &a);
int choosePokeType(int &b);
int choosePickType(int &c);
```

Fig. 4.

And then pass these variables into the function. This process is to let the user define the variables' value.

```
    chooseType(Type);
    choosePokeType(pokeType);
    choosePickType(pickType);
```

Fig. 5.

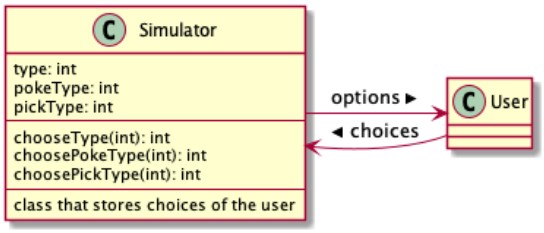

Fig. 6.

At last, the program use a if-else-if statement to screen out the different combination and then print out the result.

```
    if (pokeType==1&&pickType==8) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }
    else if (pokeType==1&&pickType==12) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }else if (pokeType==1&&pickType==13) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }else if (pokeType==3&&pickType==6) {
        for (int i=0; i<=100; i++) {
            cout << "Analysing..." << endl;
        }
         cout << "..." << endl;
         cout << "Result: Super Effective." << endl;
         cout << endl;
    }else if (pokeType==3&&pickType==15) {
        for (int i=0; i<=100; i++) {
```

Fig. 7. Screen shot 3

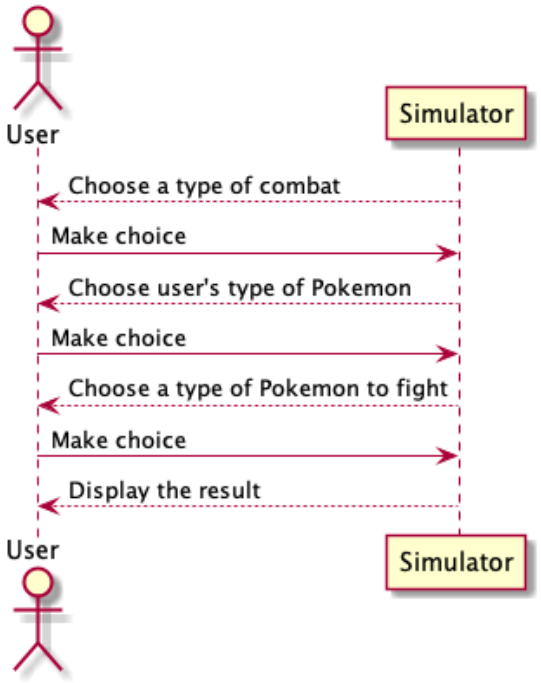
User
Simulator
Choose a type of combat
Make choice
Choose user's type of Pokemon
Make choice
Choose a type of Pokemon to fight
Make choice
Display the result
User
Simulator

Fig. 8.

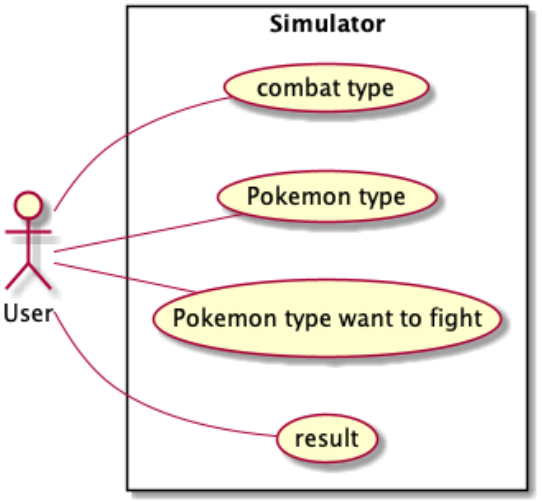
Simulator
combat type
Pokemon type
Pokemon type want to fight
result
User

Fig. 9.