

#1

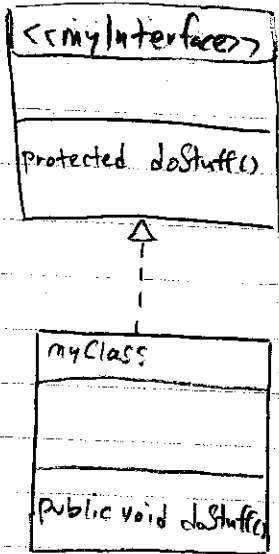
Control-flow of 50's and 60's focused on algorithm. Main concerns were computation, efficiency and controlling complexity of computation.

1970's and 1980's mark the focus on data flow, its complexity, structure and amount. Control-flow was of lesser importance, everything revolved around data structures.

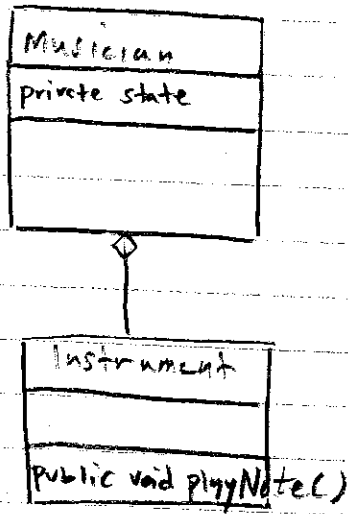
Object-oriented approach is a balance between the two approaches; an object contains both data and algorithms. Control flow and data flow coexist together.

Problem #2

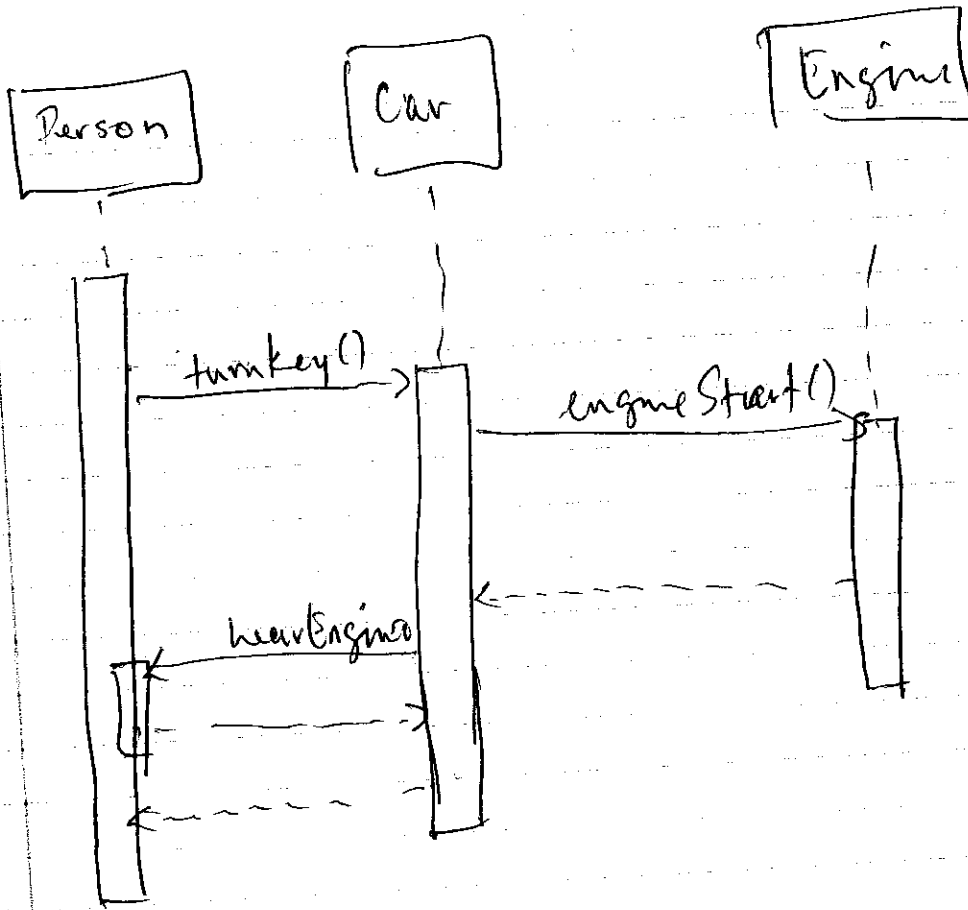
a.)



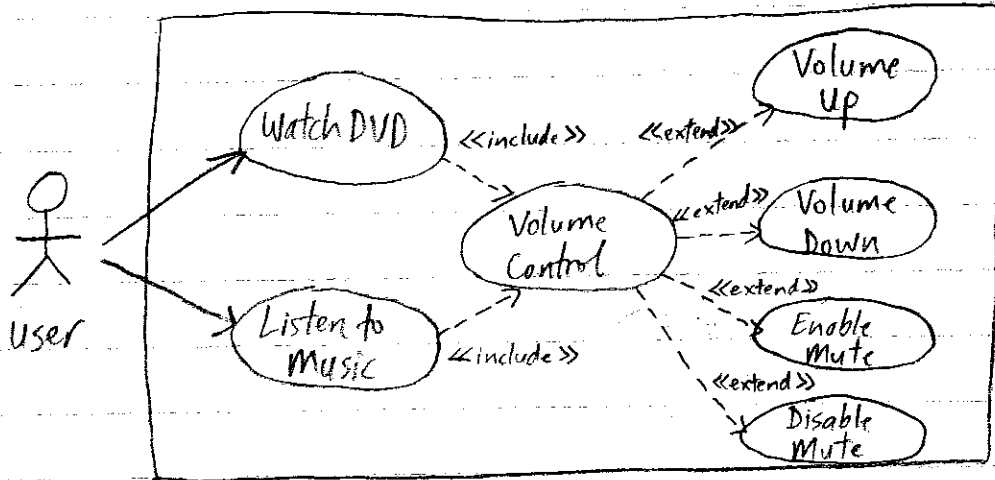
b.)



3



(4)



#5

Verification of byte-code

- looking for improper structures and control flows
- violation of access restrictions
- any violation of the type system

#6

Ant's target tag is used to call a set of instructions in a build.xml file that are organized based on functionality.

ex

Dependencies get checked, then "foo" is run.

```
<Property Name="foo" value="newdir"/>
```

```
<target name="all" depends="dir, dir2">  
  <mkdir dir="${foo}" />  
</target />
```

Ant's <Property> tag defines a variable that can be used in the build.xml file.

7) Explain how x/y is handled when y is 0 and:

a) x is a nonzero int or

b) x is some nonzero float

I) Assume " y is 0" means y is an int of value zero.

a) x and y are both ints, therefore JVM throws an Arithmetic Exception.

b) x is float, then the expression x/y yields NaN.

#8

Kietle
Colles Alvarad.

Print to console a variable # of arguments passed to a method. The arguments are passed into the method separated by commas.

Declaration:

```
public void printStrings(int index, String... str)
{
    // implementation
}
```

could have more than one parameter

can only have one parameter of this form must be last parameter

How to use:

```
myClass.printStrings(1, "Hello", "People");
myClass.printStrings(2, "wake up", "I'm cold");
myClass.printStrings(5, "hello world", "Hello Java", "Java Rocks!");
```

Also, can do:

```
String myStrings[];
```

```
myClass.printStrings(5, myStrings);
```

Did not cover problem 9 & 10
because lectures not there
yet.