

Evidence for project unit I & T

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Week 6 - Reference I.T 7

Demonstrate the use of polymorphism in a program - the first screenshot shows the ArcadeGame interface, a simple class which will be implemented by other classes to allow them to be of type ArcadeGame.

```
public interface ArcadeGame {  
}
```

The images below show the classes implementing the ArcadeGame interface.

```
public class Asteroids implements ArcadeGame {  
}
```

```
public class Caterpillar implements ArcadeGame {  
}
```

```
public class PacMan implements ArcadeGame {  
}
```

In the Arcade class below we can now have the method install which accepts anything of type ArcadeGame, so we can pass in any of the three classes above that implement it instead of needing to handle them separately.

```
public class Arcade {  
    private ArrayList<ArcadeGame> games = new ArrayList<>();  
    public void install(ArcadeGame game) {  
        games.add(game);  
    }  
}
```