# Assignment 4: Object Oriented PHP and Ajax

### Part 1: OOP Design Principles

Design a vending machine using OOP principles in PHP. The vending machine should sell chocolate bars for $1.75, pop for $1.50 and chips for $1.25. The machine accepts 1 dollar and 5, 10, and 25 cent coins.

A basic form for the app would be: buttons for ordering and buttons for choosing a coin to deposit. Think carefully about what features a vending machine should have. You will be graded on how well your project is designed (and uses Object Oriented PHP). You will not be graded on how good it looks.

A hint: What happens if the user makes a mistake and enters too much money? Think about design problems like this when you start creating the app.

***Part 1 Total: 10 marks***

Part 2: Ajax

1. Create a database called message\_board
2. Create a table called messages, with two columns: user and message
3. Create a file called messages.php
4. Inside this file, select \* from messages and run the query using ***object oriented php***
5. Output each result in an echo statement which displays the user and the message
6. Create a file called input.php
7. Inside this file, check if the posted user and message are NOT empty, if they aren’t, insert them into the database
8. Open the index.html file inside the starter files
9. Inside the ***getMessage()*** function, use AJAX to “GET” messages.php ***HINT: Use the Fetch API or XMLHttpRequest***
10. Display the text response inside the div with id “display”. ***HINT: You can get the element by id, and set the innerHTML***
11. Inside the postData() function, create a FormData object
12. Append to the FormData with a key of “message” and the value of the “message” input. ***HINT: document.getElementById("message").value***
13. Append to the FormData with a key of “user” and the value of the “user” input
14. ***POST*** the FormData object to input.php using the Fetch API or XMLHttpRequest
15. Create a timer with the ***setInterval*** function which calls the “***getMessage()***” function every second

***Part 2 Total: 10 marks***