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**Centre name:** Coopers School

**Centre number:** 14233

**Project title:** tbd

**Qualifcation code:** tbd

**Date:** tbd

**Analysis**

**Proposal**

**Problem Identification**

An Ebay/Amazon seller wants to move off their platform to have more control of the way they sell

and market their

products.­ The owner wants to be

* Receive payment both through card and PayPal transactions.
* Theme the shops to suit the products
* Update stock and prices quickly from their phone
* Email customers with discount codes for products they are predicted to buy automatically

**Stakeholders**

Small business owners

Shop customers

**Research**

Current solutions that already exist:

* Shopify (just for ecommerce)
* WordPress (harder to use than others but more customisable)
* Squarespace (can be used both for normal websites and ecommerce)
* Wix (like Squarespace)

Features of the proposed solution:



**Requirements**

Software & hardware requirements

Stakeholder requirements

**Success Criteria**

**Solution**

To make a program which makes it easy for an online shop (supporting all the current payment methods) to be set up.

**Why is it suited to a computational solution?**

* Decomposition
  + Machine learning for what customers buy:
    - Collect data about what similar customers are buying
    - Group similar customers together
    - Train the model
    - Send discount emails based on what they are likely to buy
* Pattern recognition
  + Each item in the shop will have similar properties e.g:
    - Sell by date
    - Price
    - Relevant tags
    - Weight
    - Calories (if it is food)
  + Each user will have similar properties:
    - UID
    - Username
    - Email
    - Password
  + Each shop ‘Admin’ will have similar properties:
    - Permission to:
      * Edit stock
      * Update stock
      * Remove stock
      * Create orders
      * Remove orders
      * Receive payment
      * Process refunds
* Abstraction
* Algorithmic thinking