**Design, and Tool Selection**

* Understand problem
  + Communication and analysis:

Client’s ultimate goal is being able to sell his rings through Instagram and Facebook Market. In order to do this, he needs to have a website where buyers will be redirected to from the Instagram and Facebook apps.

* + Specification: what system should do:

The website should display all rings he currently has for sale, permitting him to add or delete ring postings based on inventory. Users should be able to make a purchase either from the website itself or from Facebook and Instagram Market with after being prompted for shipping and payment information.

* Plan solution
  + Feasibility study:

Because of the limited time I have working on this project alongside many others, the project scope is a huge determinant in choosing a development process which requires quick development and implementation.

* + - Is proposed system worthwhile and doable?

The Cowboy Coding / Code-and-fix model best fits since I will be learning to code, as I code.

A picture containing text

Description automatically generated

* + Functional Requirements:
  + Non-Functional Requirements:
  + Modeling and software design:
    - defining organization & creating system:

The system will be designed and created by me. For creation, I will use Visual Studio Code to create the HTML5 code for the website along with JavaScript, and CSS, then use Bootstrap framework for code optimization. The client has given me full design control so the decision to progress with these is based on my prior knowledge and an easy learning curve to new software. Resources such as YouTube, Google, and other available APIs such as PayPal payment will help facilitate development.

* Carry out plan:

Frontend part of the code will be implemented on Visual Studio Code, while backend will be handled on Joomla which supports PHP. DreamHost will provide server-side configurations.

* Examine result(s) for accuracy:
  + Testing validation: Does system do what it is supposed to do?
    - **Quality assurance**: System tests will be run as code is developed to ensure progressiveness.
    - **Validity**: The system will provide the main functions which best support the customer’s needs such as browsing rings in inventory and making a purchase.
    - **Consistency**. Are there any requirements conflicts?
    - **Completeness**: All main functions required by client will be implemented.
* Delivery/Deployment
  + Client should have a website on the web no later than March 10th, 2021.
* Evolution: Changing system in response to customer needs
  + **Realism**: Current project budget is $35.98 which goes towards a “.com” domain name purchase on godaddy.
  + Other ideas either the client or I come across throughout the development process will be held for further version updates.