**Product Backlog for**

**Geology Database**

**Version: 1.0**

**Date created: 10/3/21**

**Prepared by:**

**Ben Pink**

**Clayton Rath**

**David Vegter**

**Demetrios Green**

**Product Description**

A geological cataloging application for Beth Johnson and the Geological collection at the University of Wisconsin Fox Cities Campus (Potential Project Ideas – 5) who are seeking a solution to better manage their collection of rocks, minerals, and fossils. Our application would allow for creating, updating, sorting, filtering of entries of geological samples given categorical data provided by the department. It would also allow the uploading of sample photos associated with each entry. This application is unlike their current Google Sheets implementation which can only search single sample entries at a time and currently does not provide sample images. Our geological cataloging application’s scope would be driven by and for the UWO - Fox Valley geology department while being adaptable for future rocks, minerals, and fossils. (DG)

**Functional Requirements**

Write up the functional requirements for your project using multiple user stories, each of which follows the template:

As a [kind of stakeholder],

So that [I can achieve some goal],

I want to [do some task]

Each of your user stories must also:

1. Be SMART. Pay special attention to *Specific* and *Measurable*. If your user stories have any ambiguity about this, further clarify them until they are clearly specific and measurable.

2. Have story points associated with it. Use 1, 2, 3 or 5 story points.

3. Be numbered and arranged in order of priority.

1. **Main Menu |** Story Points: 5

As a user, I want to be able to view a main menu page that gives me access to the basic functionality of the application, so that I am able to interact with the application/geological samples in the catalog.(*David*)

1. **Database Initialization** | Story Points: 5

As a user, I want to be able to store and retrieve geological sample data in a centralized location for long term storage, so that I can easily manage our collection of geological samples. (*David*)

1. **Add Entry** | Story Points: 5

As a user, I want to be able to add a unique sample (rock, mineral, fossil) that has key information, so that I can increase the overall collection of geological samples in the catalog. (*BP*)

1. **Edit Entry** | Story Points: 3

As a user, I would like to edit a sample so that the catalog is up to date and relevant (*Dee*)

1. **Delete Entry** | Story Points: 2

As a user, I want to be able to delete an entry, so that I can update the catalog to ensure it includes the most correct and up-to-date information. (*BP*)

1. **Table View** | Story Points: 3

As a user, I want to have a scrollable table of samples that include key categories, so that I can view the samples by text. *(Clayton)*

1. **Entries Have Images** | Story Points: 8

As a user, I want to be able to upload a photo/s to an entry, so that I can view a real life sample/s of the entry. *(BP)*

1. **Sort by Key Field** | Story Points: 3

As a user, I want to sort my results by differing key fields, (e.g. various rock properties, ascending or descending), so that I can view the samples differently. (*Dee*)

1. **Search for an entry** | Story Points: 5

As a user, I want to be able to search for rock, mineral, and fossil by name, id, region, or other key fields so that I can see if that sample is in the catalog. (*BP*)

1. **Issue Reporting** | Story Points: 3

As a user, I want to be able to report an issue with an entry, so that it can be viewed and proper corrective action can be taken. (*BP*)

**Proposed Technical Setup**

You have to implement this project in .NET using a MySQL database and WPF.

**Lo-Fi User Interface**

What will the UI look like? Submit a **storyboard** using diagrams containing rough sketches of your product's user interface. These diagrams should depict the major UI used to implement the user stories you submit. For example, if one of your user stories was to allow a user to initiate a stock purchase, you should draw the initial UI that is presented when the user wishes to purchase a stock, along with any other major windows, messages, etc. that appear as the user navigates through this use case. The diagrams can be drawn by hand or computer. If a window leads to a dialog box, drop-down box, etc., include it as a sub-diagram. Your diagrams do not need to be pretty to get full credit, but they should be clear and legible. The main point is to illustrate your thoughts about what information should be shown and how the user will use the software.





































