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# **Monnig Meteorite Gallery**

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## **Monnig Meteorite Gallery Tour Assistance Application**

**Version <1.0>**

### **Vision Document**

<Project Name>	Version: <1.0>
Vision	Date: <dd/mmm/yy>
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## Revision History

Date	Version	Description	Author
10/1/2021	Alpha 1.0	Starting Documents	Asa Tuten
11/17/2021	Alpha 2.0	Updating Documents	Aparajita Biswas

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# Monnig Meteorite Gallery

## 1. Introduction

The purpose of this document is to discuss the vision, scope, requirements, and implementations of the Monnig Meteorite Gallery Visually Impaired Assisting Application Project briefly. It focuses on the capabilities and education equality needed by the end users while reasoning for them to be present in the first place. The details of how Increasing Accessibility In The Monnig Meteorite Gallery fulfills these needs are detailed in the use-case and supplementary specifications.

### 1.1 Background

With over 10,000 visitors per year presently, TCU's non-profit Monnig Meteorite Gallery all started when it opened on February 1, 2003. Although the museum's design has a natural flow to the gallery, the current design in terms of the content being displayed is not inclusive towards some audiences. In order to encompass this, the exhibit's paradigm should append the following, visual accessibility, content for more languages, and for all ages. This is to make content more accessible and user-friendly.

### 1.2 References

The TCU Monnig Meteorite Gallery has a website. You can look at this website.  
<https://monnigmuseum.tcu.edu/>

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## 2. Business Requirements

### 2.1 Business Opportunity/Problem Statement

This project will mediate the process of educational equity in TCU's Monnig Meteorite Gallery allowing access for educational growth in an encompassing environment.

Unfortunately, there is no current method of doing so, as the exhibit is notably inaccessible. However, with this opportunity, the deliverable of this product directly addresses this issue with intentions to ease learning environ

The problem of	Lack of visual accessibility and educational equity in TCU's Monnig Meteorite Gallery.
affects	The number of visitors that tour the gallery annually.
the impact of which is	Limiting a subset of students who would like to educationally participate in the gallery.
a successful solution would be	creating a supplemental application for ease of accessibility in the gallery

### 2.2 Business Objectives

Creating a supplemental application for ease of access

- Display all the meteorite collection at the Monnig Meteorite Gallery at TCU
- Ease of selecting the text size and adjusting the brightness of the app
- Offer different language options: English, Spanish, French, and Vietnamese
- Bluetooth implementation to display meteorites on the application based on your location in the gallery
- Have QR Code Scanners to scan a meteorite display

### 2.3 Success Metrics

- The app displays all the meteorite collections at the TCU Monnig Meteorite Gallery
- The user is able to choose their language preference and the translation is correct
- It is easy to change the text size and brightness level
- The QR Code scans and provides the correct meteorite information
- The correct meteorites are displayed on the app based on your location in the gallery

### 2.4 Vision Statement

For	Museum Visitors
Who	Visitors having visual impairments preventing them full access to museum displays

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The (product name)	Monnig Meteorite Gallery Application
That	Accommodates for impairments to provide full access to museum information and displays.
Unlike	The previous antiquated museum displays, which were not originally built to accommodate impairments, and were only available in English language.
Our product	Accommodates for more accessibility to allow visitors with impairments to fully experience the exhibit without limits.

### 3. Stakeholder Profiles and User Descriptions

#### 3.1 Stakeholder Summary

Stakeholder	Major value or benefit from this product	Attitudes	Major features of interest	Constraints	End user or not?
Museum Staff	Easier to assist Museum Visitors	Willing to assist visitors in navigating the application			
Museum Visitors	Ability to gain full experience of TCU's Monnig Meteorite Gallery regardless of visual impairments.	Willing to get the assistance feature of our application	MMG Virtual Assistant, Contrast, Font Style and size preference.		End user
Developers	Product building experience	Enthusiastic to contribute	MMG Virtual Assistant, Contrast, Font Style and size preference.		No

#### 3.2 User Environment

- The user will be given a tablet to use or can download the application before starting the tour of the gallery. Only one person is required unless a helper is needed. The tour typically takes anywhere from 30 minutes to an hour depending on the group.

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#### 4. Scope and Limitations

This project aims to leverage and integrate relevant technologies with the application to better assist users in the application. Modern technologies like BLE, Translation APIs, and cross platform development have been utilized. Furthermore, this project has set a framework and is willing to use state of the art technologies like Virtual Reality and AR.

##### 4.1 Product Perspective

This is product totally independent and self-contained, operating by it's own to assist the visitors of the gallery. The only point of relation with other existing this system had was with the old meteorite collection database. However, the meteorite collection database has now been expanded to better suit the software's data needs and faster integrations.

##### 4.2 Deployment Considerations

The developers of this project plan to make the source code opensource for a bigger impact. This application will be available in Google play store to be downloaded by anyone, and will stay installed on the Gallery guest tablets. Since the database is large in size leverage cloud solution will definitely be beneficial for this project to also better handle services including but not limited to Google Translation and Text-To-Speech.