# McFaddan

# Instruments

# Top view of different musical instruments

# Project Overview: McFaddan Online Music Store

A group of guitars in different colors

Description automatically generatedMcFaddan Instruments, a niche establishment nestled adjacent to the Music Department at Technological University of the Shannon (Mid-West) in Limerick, is poised for expansion. Recognizing the potential for growth and eager to cater to its well-established customer base, the management has envisioned the creation of the McFaddan Online Music Store—an innovative digital platform set to redefine the customer experience in the realm of musical instrument retail.

## Background

In response to the demand for an enhanced and convenient shopping experience, McFaddan Instruments aims to launch an online purchasing platform. This strategic decision stems from the desire to optimize profitability and cater to a wider clientele.

## Project Scope

The McFaddan Online Music Store will serve as a dynamic website, offering a virtual display for a diverse range of musical instruments. Customers will benefit from a seamless login and registration process, granting them access to a user-friendly interface where they can explore and browse products categorized meticulously. The platform will empower customers to manage their virtual shopping carts—adding, removing, and ultimately purchasing their desired musical instruments and accessories.

## Objectives

### Customer-Centric Interface:

* + Implement a user-friendly interface to facilitate easy navigation and engagement.
  + Enable users to log in and register, providing a personalized experience.

### Product Showcase:

* + Display a comprehensive range of musical instruments, initially focusing on instruments and subsequently expanding to include sheet music, books, and various accessories.

### Shopping Cart Functionality:

* + Allow customers to add, remove, and manage items in their virtual shopping carts.
  + Streamline the purchasing process to ensure a smooth and efficient transaction.

### Administration Portal:

* + Develop an administration portal for authorized personnel.
  + Provide functionalities for adding, modifying, and removing products.
  + Include features for monitoring and managing customer orders.

## Future Expansion

The proposed strategy involves an initial emphasis on the sale of musical instruments, with future plans to diversify into sheet music, books, and an array of music accessories such as strings, plectrums, and capos.

# Agile Methodology

![Chart, diagram

Description automatically generated]()The Agile methodology technique divides a project into many parts and uses these phases to manage the project. Continuous improvement at every stage and ongoing collaboration with the project owners is required. Teams cycle through a process of planning, carrying out, and assessing each task once the job starts. Collaboration between team members and project owners must always be ongoing throughout the designing of the web-based system to ensure everything is up to standard and what they desire.

## Agile Methodology Sprints

Sprints are time-boxed iterations of an ongoing project development cycle. They are brief, recurring phases that last one to four weeks. Agile and Scrum techniques, which divide huge, complicated product development projects into smaller, more manageable portions, are built around sprints.

The following features apply to each sprint:

* It keeps the same duration during the entire development process.
* Immediately following the successful completion of the previous sprint, a new one begins.
* The sprint has a set beginning and ending date.

Diagram

Description automatically generated with medium confidence

# Product Backlog & User Stories

A product backlog lists and prioritizes the task-level details required to execute the strategic plan set forth in the roadmap. The backlog should outline the tasks the development team has to complete to carry out the broad goals of the plan. A product backlog frequently includes tasks like user stories, use cases, and other tasks.

The product backlog is a translation of how your team will deliver the vision outlined on an agile roadmap. In many ways, it is a giant to-do list for your development team.

A screenshot of a computer

Description automatically generated

The illustration above is our product backlog with each user story broken down which our group used during our planning stage. Each member of our group was appointed their own stories, which they then went and wrote use cases for.

Each user story also had its own sprint stage assigned to it, which would come into effect when the group would ultimately start designing and building the web-based system for McFaddans Instruments. During the creation of the Product Backlog, we were in contact with the project owner to ensure they were happy that all User Stories were thought of. This is a vital part of the planning of the web-based system as this is the backbone of the website.

## User Stories

**User personas** are character profiles that represent the main clientele of a company. User personas are written as if the subject were a real person, but they also represent traits that are shared by a group of individuals.

**Why we use?**

To assist in directing any ideation process, we require user personas. A persona aids in our comprehension of a user's behaviour, experiences, and objectives. Our group gains empathy with the user as a result, which helps them concentrate their efforts. A company may better serve its customers by being aware of their varied wants and expectations thanks to this insight.

**How we create them?**

* **Segmenting our audience.** Our team starts by identifying the customers who buy our items and noting their common traits.
* **Customer’s Characteristics**. Consider the characteristics, attitudes, and difficulties of our clients. Ex: Where do they get information (through social media, online news sites or traditional media)?
* **Triggers and objections**. Consider the reasons why our clients buy our goods as well as any potential complaints.

## User Stories Examples

A screenshot of a music store

Description automatically generated

A screenshot of a computer

Description automatically generated

# Wireframes

A screen shot of a computer screen

Description automatically generated

**Wireframes** are simplified visual blueprints, representing the basic structure and layout of a digital product without intricate design details. They serve as an early guide in the design process.

**Purpose:** Wireframes facilitate efficient communication and alignment among stakeholders by outlining the fundamental components of a web page or application. They act as a visual bridge between conceptual ideas and detailed design, fostering collaboration.

**Characteristics:** Focused on structure and functionality, wireframes intentionally omit color and detailed styling. This allows for quick iterations, efficient feedback, and early identification of potential design issues.

**User Experience (UX):** Wireframes contribute to a refined user experience by presenting a clear outline of user interactions. They enable designers to identify and address usability issues early in the design process.

**Iterative Design:** Wireframes support an iterative design process, allowing teams to make quick adjustments based on feedback, business requirements, or evolving project goals.

**Efficient Communication:** Acting as a common language for interdisciplinary teams, wireframes ensure that designers, developers, and stakeholders share a unified vision. This minimizes misunderstandings and reduces the likelihood of costly revisions.

**Cost and Time Savings:** By addressing potential design issues early, wireframes contribute to cost and time savings. Changes are less resource-intensive at this stage compared to altering a fully designed and developed interface.

A screen shot of a phone

Description automatically generatedIn summary, wireframes are foundational tools in design, providing a low-fidelity representation that aids collaboration, aligns stakeholders, and ensures a user-centric approach in digital product development.

## Mobile Layout and Wireframes: Enhancing User Experience

In the realm of mobile-friendly design, our focus is on ensuring seamless accessibility of website content across all devices, particularly smaller screens. Recognizing challenges like limited space, scarce attention, and goal-oriented users, mobile version wireframes become crucial.

**Challenges:**

1. ***Limited Space****:* Mobile wireframes optimize layouts for smaller screens.
2. ***Scarce Attention:*** Prioritize clarity and simplicity to capture user focus.
3. ***Goal-Oriented Users****:* Streamline navigation for efficient task completion.

**Importance of Mobile Version Wireframes:** Dedicated mobile wireframes visualize and optimize the user experience for smaller screens. They address unique challenges, guide the placement of elements, and facilitate efficient communication among design and development teams. These wireframes ensure a cohesive and user-centric approach to responsive design, meeting the distinctive needs of mobile users effectively.