WDT PROJECT

QURAA

Dr : Nasser Tamim

Section time: Monday 1:00 - 3:00

TA Name: Dr: Farah

Team Members :

Youssef Abdalatty 202201124

Rowaida Mohamed Mahmoud 202201162

Sara Ahmed Ramadan 202201169

Dalia Emad Nemr 202202626

Yomna Mohamed Hassen 202202631

Web sit Quraa

**Objective:**

• Providing Quran recitations with interpretations & jurisprudential rulings.  
• Teaching Tajweed and the meaning of Dhikr.  
• Ensuring readability for color-blind users with optimized display options.  
• Adding voice control for easier accessibility.

**Features:**

* **Interactive Digital Mushaf** – A seamless Quran-reading experience that mimics the printed Mushaf.
* **Interpretation & Meanings** – Displaying verse meanings and interpretations alongside the Quranic text for deeper understanding.
* **Advanced Search Functionality** – Quickly find specific Surahs or verses with high accuracy.
* **Recitation Control** – Select your preferred reciter with options to play, pause, repeat, and adjust recitation speed.
* **Smooth Navigation** – Easily move between pages and Juz sections using intuitive controls.
* **Enhanced Reading Modes** – Multiple display options, including night mode and verse highlighting, for an optimized reading experience.
* **Color-Blind Friendly Design** – Customized background and color settings to enhance text clarity for users with color blindness.

**Stakeholders:**

* **Users:**
  + Individuals looking for an interactive and accessible Quran-reading experience.
  + People seeking interpretations and meanings of Quranic verses.
  + Learners and students interested in improving their Tajweed and understanding of Dhikr.
* **Religious Scholars & Educators:**
  + Provide accurate interpretations and Tajweed lessons to enhance users' understanding.
  + Offer verified Islamic rulings and guidance.
* **Developers & Designers:**
  + Build an intuitive and accessible platform that ensures a smooth user experience.
  + Implement advanced features like color-blind-friendly backgrounds and voice control for accessibility.
* **Islamic Organizations & Institutes:**
  + Support the platform with verified religious content and scholarly input.
  + Promote Quranic learning and community engagement.
* **Investors & Sponsors:**
  + Fund the development and maintenance of the platform.
  + Support accessibility improvements and expansion of educational resources.
* **Advertisers & Partners:**
  + Provide relevant Islamic content, books, and services.
  + Promote Islamic initiatives and educational programs.

### ****External-Interface Requirements****

#### **1) User Interface:**

The platform is designed to be intuitive and user-friendly, ensuring easy navigation and accessibility for all users, including those with color blindness.

#### **2) Hardware Interface:**

The software is compatible with the following devices:

**Desktop and Laptop:**

1. **Windows OS**
   * Found on: PCs and laptops running Windows.
2. **macOS (by Apple)**
   * Found on: Apple computers like MacBook, iMac.
3. **Linux (Various Distributions)**
   * Examples: Ubuntu, Fedora, Debian, Arch Linux, Mint.
   * Found on: PCs.
4. **Chrome OS (by Google)**
   * Found on: Chromebooks

**Mobile:**

1. **Android (by Google)**
   * Found on: Smartphones, tablets.
2. **iOS/iPadOS (by Apple)**
   * Found on: iPhones, iPads.
3. **HarmonyOS (by Huawei)**
   * Found on: Huawei devices.

#### **3) Software Interface:**

**For the platform to function optimally, the following software requirements must be met:**

|  |  |  |
| --- | --- | --- |
| Software | Reason | Examples |
| Audio Streaming & Playback | The platform provides Quran recitations, requiring reliable audio playback. | o Built-in media player support on Android/iOS. o Web-based audio player for browsers. |
| Internet Connectivity | Ensures access to Quranic content, interpretations, and live audio recitations. | o Wi-Fi or cellular data is necessary for streaming and updates. |
| Text-to-Speech (TTS) Services | Supports voice control and accessibility for visually impaired users. | o Google Text-to-Speech (Android) o Apple VoiceOver (iOS) |

### ****Functional Requirements:****

#### **• Description:**

The **Quran Website** is an interactive platform designed to provide users with access to the Holy Quran, including recitations, translations, and tafsir (exegesis). The system offers a user-friendly experience, allowing easy navigation through chapters and verses while supporting multiple languages and reciters. The goal is to enhance the spiritual and educational experience of users by providing a comprehensive digital Quranic resource.

**Inputs:**

* Selected Surah and Ayah.
* Preferred reciter.
* Chosen translation language.
* Tafsir selection (if needed).

**Behaviors:**

* Displays the chosen Surah and Ayah along with the corresponding translation and tafsir.
* Streams the Quranic recitation in the selected voice.

**Outputs:**

Displays Quranic verses with translations and tafsir.

* Provides audio recitations from multiple Qaris.
* Allows users to bookmark favorite verses for later reference.

### ****Examples on the Functionalities:****

#### **1) Client’s Side:**

* **Search & Navigation:** Allows users to quickly find Surahs and Ayahs using filters such as:
  + Surah name or number.
  + Juz' (part) number.
  + Specific keywords within verses.
  + Reciter name or translation language.
* **Audio Recitations:** Users can listen to different recitations from various Qaris with options for playback speed adjustment.
* **Bookmarking & Favorites:** Users can save specific verses for future reference or create a playlist of preferred recitations.
* **Tafsir & Translation:** Provides detailed explanations and multiple translations for a deeper understanding of the verses.
* **Dark Mode & Reading Settings:** Users can customize font size, background color, and display preferences for comfortable reading.

#### **2) Admin Side (Website Management):**

* **Uploading New Recitations & Translations:** Admins can add or update recitations and translations for better accessibility.
* **Managing User Bookmarks & Preferences:** Allows administrators to store user preferences and improve personalization.
* **Content Updates:**
  + Adding new Tafsir books or translations.
  + Updating the website layout for better navigation.
  + Improving search functionality and performance.
* **Usage Analytics & Feedback Collection:** Admins can track user engagement and gather feedback for continuous improvement.

### Non-Functional Requirements

* **Performance Requirements:**
  1. The website should support up to **100,000 simultaneous users** without performance issues.
  2. Page load time should not exceed **2 seconds** under normal conditions.
  3. The website must update real-time data (e.g., new recitations, tafsir updates) within **30 seconds** of any changes.
* **Scalability Requirements:**
  1. The platform should be **easily scalable** to accommodate more users and additional Quranic resources.
  2. It must handle increasing traffic and content without affecting **performance or accessibility**.
* **Reliability and Availability:**
  1. The website should have **failover mechanisms** to ensure continued access during server issues.
  2. Ensure **data accuracy**, particularly for Quranic text, translations, and tafsir.
* **Security Requirements:**
  1. User data (such as saved bookmarks and preferences) must be **encrypted** both in transit (using HTTPS) and at rest.
  2. Implement **secure authentication methods**, such as multi-factor authentication (MFA), for admin access.
  3. Protect sensitive content from **unauthorized access or modifications**.
  4. Comply with **global data privacy regulations** to safeguard user information.
* **Usability and Accessibility Requirements:**
  1. The interface should be **user-friendly**, ensuring seamless navigation.
  2. The website must be **compatible** across multiple devices (smartphones, tablets, and desktops).
  3. Provide **multi-language support** for translations and user interface.
  4. Offer features such as **screen reader support, adjustable font sizes, and dark mode** for better accessibility.
* **Maintainability Requirements:**
  1. The codebase should be **modular and well-documented** to allow easy updates and bug fixes.
  2. Implement **automated testing** to ensure that updates do not introduce errors.
  3. Provide **system monitoring tools** to track performance and resolve issues efficiently.
* **Integration Requirements:**
  1. The website should support seamless integration with **third-party services**, such as Islamic calendar APIs, prayer time APIs, and sharing options for social media.