

**PRODUCT REQUIREMENT DOCUMENT**

**Purpose of Document:**

The product addresses customers' needs by providing a user-friendly online platform specifically designed for the healthcare sector. It enables patients to easily book appointments, purchase medications, access medical records, and make payments securely from anywhere with an internet connection. By streamlining these processes, the product enhances convenience for patients and improves efficiency for healthcare providers. Additionally, the product prioritizes security, compliance, and continuous improvement to ensure a safe, reliable, and innovative solution that meets the evolving needs of users and the healthcare industry.

**PROJECT:** Healix 006

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| **Project Manager** | Healix 006 |
| **Client** | UK Hospital |
| **Accountable Officer** | Healix 006 |
| **Project ID** | Healix 006 |
| **Location** | United Kingdom |
| **Version** | 1.0 |

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| Version No | Issue Date | Revised By | Description |
| 1.0 | 17/03/2023 | Oluwatobi Aderibigbe |  |
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**Product Overview**

***Product Messaging***

The product is a commercial website for online booking and services within the hospital environment, to modernise operations and enhance accessibility for patients and healthcare professionals. The product functions to simplify the interaction between doctors and patients. Through this web platform, patients can conveniently schedule appointments online with relevant doctors, access the hospital's online pharmacy to view and order medical products and streamline the process of picking up their orders during hospital visits.  Furthermore, the platform will provide quality and affordable services to patients while creating better visibility for the business

The product is meant for patients and healthcare professionals These include doctors, nurses, patients, and healthcare practitioners. Currently, the hospital relies on paper-based booking processes for patient appointments and interactions, which have proven to be inefficient and prone to discrepancies. This traditional method of managing appointments and patient records poses several challenges to the hospital’s operations and overall effectiveness. The Product aims to develop a website where patients can conveniently book and purchase their prescribed drugs online. All transactions, including payments, will be securely processed through the website, ensuring a seamless and efficient patient and stakeholder experience.

The product differentiates itself from the competition through several key factors:

**Healthcare-Specific Features**: Unlike generic online booking and service platforms, this product is tailored specifically for the healthcare sector. It offers specialized features such as secure access to medical records, integration with electronic health records (EHR) systems, and medication purchasing capabilities, addressing the unique needs and requirements of the hospital and its patients.

**Robust Security and Compliance**: The product prioritises security and compliance with industry regulations such as HIPAA and GDPR. It implements robust security measures, encryption protocols, and access controls to protect patient information, ensuring compliance with strict data protection standards. This focus on security instills trust and confidence among users, distinguishing the product from competitors that may lack similar safeguards.

**User-Centric Design**: With a focus on usability, accessibility, and intuitive navigation, the product adopts a user-centric design approach. It features clear and intuitive interfaces, personalized user experiences, and accessibility enhancements to accommodate users with diverse needs. This emphasis on user experience sets the product apart from competitors that may offer less user-friendly or intuitive solutions.

**Seamless Integration**: The product seamlessly integrates with existing hospital systems and workflows, minimizing disruption and maximizing efficiency. It synchronizes with EHR systems, billing systems, and other essential hospital software, ensuring smooth interoperability and data exchange across platforms. This integration capability distinguishes the product from competitors that may lack similar interoperability or compatibility with existing systems.

**Continuous Improvement and Innovation**: Unlike static solutions, the product is continuously improved and updated based on user feedback, industry best practices, and technological advancements. It adopts agile development methodologies, regular feature updates, and performance optimizations to stay ahead of evolving user needs and market trends. This commitment to innovation and continuous improvement differentiates the product from competitors that may offer less dynamic or outdated solutions.

**Comprehensive Support and Training**: In addition to the product itself, the solution includes comprehensive support services and user training to facilitate smooth adoption and ongoing use. It offers resources such as user guides, training materials, and dedicated support channels to assist users in maximizing the benefits of the product. This comprehensive support offering distinguishes the product from competitors that may offer less extensive or responsive support options.

The product uniquely delivers the solution to the buyer's problem by offering a comprehensive and user-centric online platform tailored specifically to the needs of hospital patients and healthcare professionals. Here's how it stands out:

**Customized Healthcare Experience:** Unlike generic online booking platforms, this product is designed specifically for the healthcare sector, addressing the unique requirements and challenges faced by hospitals and patients. It offers tailored features such as secure access to medical records, streamlined medication purchasing, and seamless appointment scheduling, enhancing the overall healthcare experience for users.

**Integration with Existing Systems:** The product integrates seamlessly with existing hospital systems and workflows, minimizing disruption and maximizing efficiency. It can synchronize with electronic health records (EHR) systems, billing systems, and other essential hospital software, ensuring smooth interoperability and data exchange across platforms.

**Focus on Security and Compliance:** Recognizing the sensitivity of healthcare data, the product prioritizes security and compliance with industry regulations such as HIPAA and GDPR. It implements robust security measures, encryption protocols, and access controls to protect patient information and ensure regulatory compliance, instilling trust and confidence among users.

**User-Centric Design:** The product adopts a user-centric design approach, placing emphasis on usability, accessibility, and intuitive navigation. It features clear and intuitive interfaces, personalized user experiences, and accessibility enhancements to accommodate users with diverse needs, fostering inclusivity and enhancing user satisfaction.

**Continuous Improvement and Innovation:** Unlike static solutions, the product is continuously improved and updated based on user feedback, industry best practices, and technological advancements. It incorporates agile development methodologies, regular feature updates, and performance optimizations to stay ahead of evolving user needs and market trends, ensuring long-term relevance and value for the buyer.

**Comprehensive Support and Training:** In addition to the product itself, the solution includes comprehensive support services and user training to facilitate smooth adoption and ongoing use. It offers resources such as user guides, training materials, and dedicated support channels to assist users in maximizing the benefits of the product, minimizing friction, and accelerating time to value.

In summary, the product stands out by offering a tailored, secure, and user-friendly solution that seamlessly integrates with existing hospital systems, prioritizes compliance and data security, and continuously evolves to meet the evolving needs of users and the healthcare industry.

***Product Goals***

**User-Friendly Interface:** The product aims to provide a user-friendly interface that is intuitive and easy to navigate for both patients and hospital staff. This includes features such as clear and simple booking processes, streamlined medication purchasing, and accessible medical record retrieval.

**Comprehensive Functionality:** The product seeks to offer a comprehensive range of functionalities to meet the diverse needs of users. This includes the ability to book appointments, purchase medications, access medical records, make payments securely, and engage with healthcare services online seamlessly.

**Reliability and Performance:** The product aims to deliver high reliability and performance to ensure a smooth user experience. This includes fast loading times, minimal downtime, and robust security measures to protect user data and transactions.

**Integration with Existing Systems:** The product aims to seamlessly integrate with existing hospital systems and workflows to minimize disruption and maximize efficiency. This includes compatibility with electronic health records (EHR) systems, billing systems, and other essential hospital software.

**Customization and Scalability:** The product should be customizable to adapt to the unique needs of different hospitals and healthcare settings. Additionally, it should be scalable to accommodate future growth and changes in user demand.

**Compliance with Regulations:** The product aims to comply with relevant regulations and standards governing healthcare data security and privacy. This includes adherence to standards such as HIPAA and GDPR to ensure the protection of patient information.

**Continuous Improvement:** The product should be continuously improved based on user feedback and evolving industry best practices. This includes regular updates and enhancements to address usability issues, add new features, and improve overall performance.

***Product Objectives***

**Facilitate Online Booking:** The product aims to enable patients to easily schedule appointments with healthcare providers through an intuitive and efficient online booking system. This objective involves providing a seamless booking experience, allowing patients to select appointment times, specify preferences, and receive confirmation promptly.

**Streamline Medication Purchases:** The product seeks to streamline the process of purchasing medications by providing an online platform where patients can conveniently order their prescribed drugs. This objective involves ensuring secure payment processing, accurate medication information, and timely delivery or pickup options.

**Provide Access to Medical Records:** The product aims to provide patients with secure access to their medical records through an online portal. This objective involves implementing robust authentication mechanisms, organizing medical records in a user-friendly format, and ensuring compliance with privacy regulations.

**Enable Secure Payment Processing:** The product aims to facilitate secure payment processing for various healthcare services, including appointment bookings and medication purchases. This objective involves implementing encryption protocols, PCI compliance standards, and secure payment gateways to protect sensitive financial information.

**Enhance User Engagement:** The product seeks to enhance user engagement by providing interactive features and personalized experiences. This objective involves incorporating features such as notifications, reminders, and personalized recommendations to keep users informed and engaged with the platform.

**Ensure Data Security and Privacy:** The product aims to prioritize data security and privacy to protect patient information from unauthorized access or breaches. This objective involves implementing robust security measures, such as encryption, access controls, and regular security audits, to safeguard sensitive data.

**Promote Accessibility:** The product aims to promote accessibility by ensuring that it is usable by individuals with disabilities or diverse needs. This objective involves adhering to accessibility standards, such as WCAG 2.1 AA, and providing features such as alternative text, keyboard navigation, and screen reader compatibility.

**Foster Continuous Improvement:** The product aims to foster a culture of continuous improvement by soliciting feedback from users and stakeholders and incorporating it into future iterations. This objective involves establishing feedback mechanisms, conducting usability testing, and prioritizing enhancements based on user needs and preferences.

***Product Success Metrics***

**User Adoption Rate:** Measure the percentage of hospital patients who actively use the online booking and service platform within a specified time frame, such as the first month post-launch. This metric indicates the level of acceptance and uptake of the product among the target user base.

**Transaction Volume:** Track the number of transactions processed through the platform, including appointment bookings, medication purchases, and payment transactions. This metric helps assess the product's effectiveness in facilitating healthcare service delivery and generating revenue for the hospital.

**Customer Satisfaction Score:** Gather feedback from users through surveys or ratings to evaluate their satisfaction level with the product. This metric provides insights into user perceptions of the platform's usability, functionality, and overall experience.

**System Uptime:** Monitor the uptime of the online platform to ensure it remains available and accessible to users without interruptions. This metric reflects the product's reliability and performance in delivering uninterrupted service to users.

**Security Compliance:** Conduct regular security audits and assessments to ensure the platform meets industry standards and regulatory requirements for data security and privacy, such as HIPAA and GDPR. This metric demonstrates the product's commitment to safeguarding patient information.

**Page Load Times:** Measure the average load times for web pages within the platform to assess its responsiveness and user experience. Aim for fast loading times (e.g., below 3 seconds) to ensure optimal performance and minimize user frustration.

**Accessibility Compliance:** Evaluate the platform's compliance with accessibility standards, such as WCAG 2.1 AA, to ensure it is accessible to users with disabilities. This metric demonstrates the product's commitment to inclusivity and ensuring equal access to healthcare services for all users.

**Bug Resolution Time:** Track the time taken to resolve reported bugs or issues identified by users post-launch. Aim to address critical issues promptly (e.g., within 72 hours) to minimize disruptions and maintain user satisfaction.

**Feature Adoption Rate:** Measure the usage and adoption rates of key features within the platform, such as online appointment scheduling, medication purchasing, and medical record access. This metric helps identify popular features and areas for improvement or further promotion.

**Return on Investment (ROI):** Calculate the financial return generated by the product relative to the investment made in its development and implementation. This metric provides insight into the product's effectiveness in achieving its business objectives and generating value for the hospital.

***Target Audience***

The following describes the ideal target market for this product

**Category A**

Young adults between the ages of 18 - 26

Occupation: College Students and young professionals

Location: United Kingdom

Income range: 2000 - 4000 GBP

This group of people have the following lifestyle and behaviours;

* Tight schedules
* Enjoys physical activities
* Values nature and the outdoors
* Gym activities and fitness
* Eat healthy and prioritize nutritious food choices

Challenges faced by this group include; Balancing academic and or work commitments with maintaining a healthy lifestyle

Modern Tech Knowledge: Moderate

**Category B**

Adults between the ages of 26 - 44

Occupation: Working professionals

Location: United Kingdom

Income range: 3000 – 6000 GBP

This group of people have the following lifestyle and behaviours;

* Runs a laundry company for his kids' clothing
* Utilises high-speed wifi for trading
* Needs & Goals:
* Stays updated on crypto news for trading purposes
* Arranges transportation to pick up his kids after school
* Prefers housing located next to the metro for convenience
* Seeks prompt food delivery options for his children

Challenges faced by this group include managing parental responsibilities and work commitments efficiently

* **Geography**

The target geography for the product is the United Kingdom

**MVP Product Features**

MVP requirements outlined in the project mandate

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|  | **High Level Requirement** | **Low Level Requirement** |
| **1** | **Contact us** | **Edit Contact**  **Delete Contact**  **Add Contact**  **Create Account**  **Manage Account** |
| **2** | **Account** | **Sign In**  **Sign Out**  **Change Password** |
| **3** | **FAQ** | **Upload FAQ**  **Delete FAQ**  **Edit FAQ** |
| **4** | **Notifications** | **View**  **Delete**  **Stop Notification** |
| **5** | **About Us** | **Upload**  **Delete**  **Modify** |
| **6** | **Payments** | **Payment Records**  **Generate Payment Receipt** |

**Product Backlog**

These are High-Level Requirements (HLR) and Low-Level Requirements (LLR) that we can add as features after the MVP has been released

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| **S/N** | **High Level Requirements** | **Low Level Requirements** |
| **1** | **User Registration and Authentication** |  |
| **2** | **Appointment Booking System** |  |
| **3** | **Medication Purchasing Platform** |  |
| **4** | **Medical Records Access** |  |
| **5** | **Payment Processing** |  |
| **6** | **Notifications and Reminders** |  |
| **7** | **Content Management System (CMS)** |  |
| **8** | **Security and Compliance** |  |
| **9** | **Integration with External Systems** |  |