**PROJECT**

HEALTHCARE APP

SUBMITTED BY: DIVYA GUPTA

**SIGNIFICANCE OF THE PROJECT**

The Healthcare App project was selected because it has the potential to greatly improve overall health and wellbeing by providing a comprehensive platform that allows users to monitor health metrics, get medication reminders, and access resources for mental health. By offering a unified solution that promotes medication adherence, supports mental health, and protects user data privacy and security, it meets important needs in healthcare management. The design of the app makes health management more convenient and accessible for a wide range of users, including seniors, patients with medical conditions, and people looking to improve their health. The app seeks to address the issue of fragmented health management by combining numerous health-related features into a single platform, providing users with a comprehensive method for tracking and enhancing their health.

**PROJECT MANAGEMENT ORGANIZATION STRUCTURE**

Given the project's requirements and nature, a matrix organizational structure would make sense. Team members from various departments, including development, design, and healthcare consulting, can work well together in a matrix structure by utilizing their specialties and keeping their positions within those departments. Sharing of resources is made easier, cross-domain communication is improved, and project demands can be met with more flexibility thanks to this structure. The successful development and implementation of the Healthcare App necessitates an interdisciplinary approach that combines technology, healthcare insights, and user experience design. A matrix organization would allow the team to integrate diverse skills and perspectives in an adaptive manner.

**SCOPE STATEMENT**

**Description:**

With the ability to track multiple health metrics, receive medication reminders, and access mental health support tools, the Healthcare App offers users a comprehensive healthcare solution. The app's goal is to enhance users' general health and wellbeing by offering reminders and personalized health insights.

**Objective:**

* To offer easy to use platform for tracking health metrics.
* Provide reminders for medication intake.
* Offer mental health support.
* Data privacy and security.

**Deliverables:**

* Health Metrics Tracking: Track steps, heart rate, and sleep patterns. Manual entry for data not collected through wearable devices.
* Medication Reminders: medication reminders with options for frequency, dosage, and specific times.
* Mental health support: Articles and resources on various mental health topics. Guided meditation and breathing exercise sessions.

**Target Audience:**

* Individuals trying to improve their health.
* Patients with medical conditions
* Senior citizens

**Technology:**

* Framework for app development
* UI/UX designing.
* Front-end/Back-end Development
* Database management
* Cloud services for hosting, storage, etc.

**Milestones:**

* Research and Planning using market analysis, technology selection, etc.
* UI/UX design for app. Creating Wireframes and prototypes.
* Development of the application.
* Testing the application before launch.
* Initial release and deployment.
* Post-launch feedback and additions.

**Risks:**

* Data and privacy issues as user data will be collected.
* Technical issues.
* Less-user engagement.
* Market competition

**SCOPE CREEPS**

**Integration with Wearable Devices:** Increasing the app's scalability to synchronize with a larger range of wearable devices may improve user experience at the expense of increased scope. It entails a lot of compatibility testing and possibly forging new alliances with device makers.  
  
**Community Features:** Including social features in the app could boost user participation but make development and moderation more difficult. Examples of these features include user forums and group challenges.  
  
**Increased Mental Health Support:** Adding one-on-one counseling services or AI chatbots to the list of mental health features could be very beneficial, but it would also greatly increase the scope and necessitate additional training and regulatory compliance.  
  
**Multilingual Support:** Making the app available in several languages would increase its marketability by reaching a larger audience, but it would also increase the project's budget and timeline.

**PROJECT PRIORITIES**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **time** | **scope** | **cost** |
| **Constrains** |  |  |  |
| **Enhance** |  |  |  |
| **accept** |  |  |  |

Time under constraints is given priority when filling out the Healthcare App project priorities matrix. This is done to ensure a timely release, which is essential for meeting market and regulatory deadlines. The fact that the word cost is placed under enhancement implies that, although sticking to a budget is crucial, you are prepared to spend more if it results in a notable improvement in quality or increased user satisfaction. Finally, the most flexible element is the scope, which is listed under accept. It states that although the app's essential features are set, we're willing to change its features in response to user feedback, new developments in technology, or modifications to healthcare laws. This matrix structure demonstrates a calculated strategy to deliver the application on schedule, within a reasonable budget, and with the adaptability to change the scope.

**WORK BREAKDOWN STRUCTURE**

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**WBS INTEGRATED WITH THE PROJECT ORGANISATION AND RESPONSIBILITY MATRICES:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Milestone | Project manager | UI/UX team | Dev Team | Testing team |
| Project Initiation | R |  |  |  |
| Project Planning | R |  |  |  |
| UI/UX Design | A | R |  |  |
| App Development | A |  | R |  |
| Testing | A |  | R | R |
| Deployment | A |  | R |  |
| Post-Launch | A | R | R | R |

- A: Accountable (Ultimately responsible for the milestone/task)

- R: Responsible (Responsible for executing the milestone/task)

- Blank: Not Applicable (No direct involvement in the milestone/task)

**COMMUNICATION PLAN**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| information | recipient | frequency | Method of communication | Provider |
| Updates , Progress and Milestones | Team members | Weekly | email | Project manager |
| Key descisions , approvals | stakeholders | As needed | email | Project manager |
| Daily team meetings | Team members | daily | Calls, in person | Project manager |
| Weekly reports | Stakeholders | weekly | email | Project manager |
| Launch information | Team members | As needed | email | Project manager |
|  | stakeholders | As needed | email | Project manager |
|  | customers | As needed | Email, ads | Marketing team |

**PROJECT TIME AND COST ESTIMATION**

**Project Initiation:**

Define project scope: 3 days

Identify stakeholders: 2 days

Develop project charter: 1 day

Estimated cost: $2,500

**Project Planning:**

Conduct market analysis: 10 days

Select technology framework: 3 days

Develop project plan and schedule: 5 days

Resource allocation: 2 days

Estimated cost: $10,000

**UI/UX Design:**

Create wireframes and prototypes: 5 days

Design user interface: 5 days

Conduct user experience research: 5 days

Estimated cost: $15,000

**App Development:**

Front-end development: 7 days

Back-end development: 7 days

Database management: 4 days

Implement cloud services: 4 days

Estimated cost: $40,000

**Testing:**

Functional testing: 3 days

Usability testing: 3 days

Performance testing: 3 days

Security testing: 3 days

Estimated cost: $12,000

**Deployment:**

Deploy the application: 2 days

Monitor deployment for issues: 1 day

Initial release management: 1 day

Estimated cost: $5,000

**Post-Launch**:

Collect and analyze user feedback: 10 days

Feature additions or improvements: 10 days

Continuous maintenance and support: ongoing

Estimated cost: $30,000

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**GANTT CHART WITH CRITICAL PATH**

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**EARLY, LATE AND SLACK AVTIVITY TIME**

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**RISK ASSESSMENT FORM:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Risk event** | **likelihood** | **impact** | **Detection difficulty** | **catagory** | **when** |
| **1** | Data breach leading to loss of user data | **3** | **5** | **3** | **Security** | **Post-launch** |
| **2** | Regulatory compliance issues | **1** | **5** | **2** | **Legal** | **Development** |
| **3** | User engagement lower than expected | **5** | **3** | **1** | **Market** | **Post-launch** |
| **4** | Overrunning development cost | **3** | **3** | **4** | **Financial** | **development** |
| **5** | Technical delays in development | **3** | **5** | **4** | **Technical** | **development** |
| **6** | Third-party service outages (e.g., cloud services) | **1** | **3** | **1** | **Technical** | **Development, post-launch** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | 3 |  |  | 5 |
|  |  |  |  |  | 4 |
|  |  | 4 |  | 1,5 | 3 | Likelihood |
|  |  |  |  |  | 2 |
|  |  | 6 |  | 2 | 1 |
| 1 | 2 | 3 | 4 | 5 |  |

Impact

**RISK REGISTER PLAN:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Risk Description** | **Date raised** | **Likelihood(1-5)** | **Impact(1-5)** | **Severity(1-10)** | **Owner** | **Mitigation Action** | **Contingent Action** | **Progress on Actions** | **Status** |
| **1** | **Data breach leading to loss of user data** | **2024-03-10** | **3** | **5** | **8** | **Team lead** | **Encrypt data in transit and at rest, conduct training** | **Incident response plan, public relations strategy** | **open** | **ongoing** |
| **2** | **Regulatory compliance issues** | **2024-03-10** | **2** | **5** | **7** | **Project manager** | **Regular legal reviews, engage with healthcare advisors** | **Adapt operations to new laws** | **open** | **ongoing** |
| **3** | **User engagement lower than expected** | **2024-03-10** | **4** | **3** | **7** | **Marketing team** | **User experience testing, feedback loops** | **Market re-analysis, feature updates** | **open** | **pending** |
| **4** | **Overrunning development cost** | **2024-03-10** | **3** | **3** | **6** | **Project manager** | **Track expenses closely, phase developments** | **Scope reduction, funding options** | **open** | **pending** |
| **5** | **Technical delays in development** | **2024-03-10** | **3** | **5** | **8** | **Dev Team lead** | **Use experienced developers, modular development** | **Outsource tasks, overtime work** | **open** | **pending** |
| **6** | **Third-party service outages** | **2024-03-10** | **2** | **3** | **5** | **Dev team lead** | **SLAs with third-party services, contingency plans** | **Switch to alternate services, manual operations** | **open** | **pending** |

**EXPECTED CHALLENGES**

**Team management**: Putting together a group of individuals with dierent experiences and expertise can be difficult, especially when it comes to encouraging candid communication and a cooperative atmosphere. Critical abilities include resolving conflicts and distributing the workload to avoid team burnout.  
  
**Relationships with Stakeholders:** Stakeholders may have a range of interests, some of which may conflict. It's critical to keep lines of communication open and consistent while also setting expectations. In order to maintain the project's alignment with stakeholder needs, the project manager must carefully manage these relationships.  
  
**Uncertainties:** Any project, but particularly those in the rapidly changing tech and health sectors, must deal with issues like changing consumer demands and new legal requirements. One of the biggest challenges is being able to change course and adjust to these changes without completely ruining the project.

**Risk management :** It is about anticipating and identifying possible hazards as soon as possible. This entails developing risk-mitigation strategies as well as having backup plans ready in case something unforeseen happens. By taking a proactive approach to risk management, minor issues can be avoided before they become project-threatening ones.  
  
**Resource Allocation:** Careful management is necessary due to the scarcity of resources, including time, people, and technology. To make the most of the resources at hand, careful planning, task prioritization, and maximizing the strengths of team members are required.  
  
**Cost management:** Project managers frequently struggle to stay within the allocated budget. Costs must be precisely estimated, closely monitored, and managed during the course of the project. Project plans frequently need to be reviewed and adjusted to conform to budgetary constraints due to cost-related issues.