**Resource Management Document – MediAccessHub**

**1. Introduction**

Resource Management ensures that all modules of MediAccessHub — including Doctor, Patient, Admin, and Monitoring components — are developed and maintained efficiently. It focuses on optimal use of human resources, technology, and time while ensuring each team member can contribute effectively toward their respective sections.

**2. Human Resources**

| **Team Member** | **Role** | **Responsibility Summary** |
| --- | --- | --- |
| Tashfiqul Rhidoy Prodhan | Doctor Portal Developer | Handles doctor login, dashboard, availability update, patient record operations. |
| Md Mahmudul Hasan Saif | Admin Portal Developer | Develops admin interface, user management, scheduling system, approval flows. |
| Prateek Maharjan | Patient Portal Developer | Manages patient registration, appointments, record access, and interface usability. |
| Abyead Faisal Arnob | Monitoring & Reporting Developer | Implements dashboards, data tracking, usage visualization, and export functions. |

**3. Technical Resources**

| **Resource Type** | **Tools & Details** |
| --- | --- |
| Development Tools | Visual Studio Code, IntelliJ, or any IDE suitable for web & backend development |
| Version Control | GitHub – to track source code and enable collaborative development |
| Hosting/Test Server | Localhost or cloud environments like Heroku, Vercel, or Firebase (free tiers) |
| Database | MySQL / Firebase Realtime Database / MongoDB (based on selected backend) |
| Other Dependencies | Node.js / Express / Django (backend frameworks as required) |

**4. Financial Resources**

* **Estimated Cost:** $0
* **Remarks:** All components will utilize **open-source** or **freemium tools**. No paid resources are required unless upgraded features or deployments are later desired.

**5. Module-Wise Resource Assignment**

**Doctor Portal (Tashfiqul)**

* **Assigned Developer:** Tashfiqul Rhidoy Prodhan
* **Responsibilities:**
  + Build secure login system for doctors
  + Design and implement dashboards
  + Enable CRUD operations for patient records
  + Manage doctor availability using calendar interface
  + View scheduled appointments
* **Resources Used:**
  + PC/Laptop
  + Coding software (IDE)
  + Secure database with role-based access
  + GitHub for code tracking

**Patient Portal (Prateek)**

* **Assigned Developer:** Prateek Maharjan
* **Responsibilities:**
  + Enable user registration and secure login
  + Display medical records with download options
  + Implement appointment request and modification flows
* **Resources Used:**
  + HTML/CSS, React or Vue.js for frontend
  + Database for patient records and appointments
  + Secure encryption libraries for password hashing
  + Form validation logic

**Admin Portal (Saif)**

* **Assigned Developer:** Md Mahmudul Hasan Saif
* **Responsibilities:**
  + Manage all users (doctors and patients)
  + Approve/reject doctor registration and availability
  + Manage system schedule and appointment conflicts
  + Maintain system-wide access control and monitoring
* **Resources Used:**
  + Admin dashboard framework (e.g., AdminLTE, Bootstrap)
  + Role-based access control mechanisms
  + Notifications module (for approvals)
  + Audit trail logging system

**Monitoring & Reports Module (Arnob)**

* **Assigned Developer:** Abyead Faisal Arnob
* **Responsibilities:**
  + Implement dashboards showing login and appointment statistics
  + Export data in CSV or PDF
  + Real-time system usage tracking
* **Resources Used:**
  + Charting libraries (e.g., Chart.js, D3.js)
  + Export libraries (e.g., jsPDF, PapaParse)
  + File generation tools
  + Backend query optimization for reporting

**6. Risk Management and Contingencies**

* **Data Loss**: GitHub version control and local backups mitigate this.
* **Team Unavailability**: Team members can hand over documentation/code access.
* **Performance Bottlenecks**: Load testing to be done during development to avoid crashes.
* **Security Threats**: Secure password hashing, role-based access, and HTTPS enforcement.