**PROJECT PLAN DOCUMENT**

**(Due: 31st January)**

| Project number | ***Team - 18*** |
| --- | --- |
| Project Title | ***Slack-Bot and MS Teams-Bot Integration*** |
| Document | Project Plan |
| Creation date | ***25/01/2025*** |
| Created By | ***Atharv Johar , Ayush Sheta*** |
| Client | ***Bibu Prasad Sahoo*** |

# **Brief problem statement**

This project aims to integrate uExcelerate’s coaching platform with Slack and Microsoft Teams to enable seamless interactions directly from these collaboration tools. Users will be able to perform key actions such as Coach Search, Create Action, Create Goal, and Schedule Coaching Sessions through a bot interface, enhancing productivity and ease of access.

# **Team Members**

***Ayush Sheta: 2023101057***

***Aryan Chaudhary: 2023114015  
Prajna Penmetsa: 2023114017  
Joshita Dhanireddy:2023101095***

***Atharv Johar:2023114010***

# **Team Communication**

* **Meet with client weekly once on Saturday**
* **Team meet every Sunday to discuss about task in hand for that given week**

# **Development Environment**

#### 1. Development Environment:

* **VS Code** – Preferred IDE for writing and managing code.
* **AWS Console & CLI** – For managing AWS Lambda and API Gateway configurations.

#### 2. Programming Languages & Frameworks:

* **JavaScript (Node.js)** – Primary backend programming language.
* **Express.js** – Framework for server-side logic.
* **Microsoft Bot Framework SDK** – For MS Teams bot development.
* **Slack SDK** – For integrating the bot with Slack.

#### 3. Database & ORM:

* **PostgreSQL** – Primary database for data storage.
* **Sequelize** – ORM (Object-Relational Mapping) tool for managing database interactions.

#### 4. Integrations & APIs:

* **uExcelerate APIs** – Used for coach search, goal creation, and session scheduling.
* **Google Calendar API** – For scheduling and managing events.
* **Outlook API** – For integrating with Microsoft’s calendar system.

#### 5. Hosting & Deployment:

* **AWS Lambda** – Serverless architecture for hosting bot functions.
* **AWS API Gateway** – To expose APIs and route traffic.

#### 6. Authentication & Security:

* **OAuth 2.0** – For secure user authentication in Slack and MS Teams.

#### 7. Collaboration & Documentation:

* **GitHub** – For version control and collaboration.
* **Slack & MS Teams** – Team communication and collaboration.
* **Google Docs** – For project documentation.

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### High-Level Milestone Schedule

| **Milestone** | **Due Date** | **Release** | **Deliverable?** |
| --- | --- | --- | --- |
| **Phase 1: Preparation & Learning** |  |  |  |
| Understanding Client Requirements | 18 Jan 2025 | R1 | Yes |
| Discussing Bot Architecture (Command & Message Handling for Slack) | 18 Jan 2025 | R1 | Yes |
| Finalizing Tech Stack (slack and msteams) | 22 Jan 2025 | R1 | Yes |
| Learning Node.js Fundamentals | 25 Jan 2025 | R1 | Yes |
| **Phase 2: Design & Prototyping** |  |  |  |
| Designing Bot Workflows (Slack: Command & Message Handling, MS Teams) | 25 Jan 2025 | R2 | No |
| Creating UI/UX Prototypes (Interactive Cards, Forms) | 29 Jan 2025 | R2 | No |
| **Phase 3: Development** |  |  |  |
| Creating a Sample Slack Bot (Command Handling, without uExcelerate APIs) | 25 Jan 2025 | R2 | Yes |
| Creating a Sample Slack Bot (Message Handling, without uExcelerate APIs) | 1 Feb 2025 | R2 | Yes |
| Creating a Sample MS Teams Bot (without uExcelerate APIs) | 1 Feb 2025 | R2 | No |
| Learning Google Calendar APIs & Scheduling | 8 Feb 2025 | R2 | No |
| Upgrading Slack Prototype with Interactive Commands (Menus, Buttons) | 1 Feb 2025 | R2 | No |
| Upgrading Slack Prototype with Message Handling Enhancements | 8 Feb 2025 | R2 | No |
| Upgrading MS Teams Prototype with Interactive Commands | 8 Feb 2025 | R2 | No |
| AI Integration in Slack Bot | 8 Feb 2025 | R3 | No |
| AI Integration in MS Teams Bot | 15 Feb 2025 | R3 | No |
| Developing Slack Bot with uExcelerate APIs (Commands & Messages) | Week 5-6 | R3 | No |
| Developing MS Teams Bot with uExcelerate APIs | Week 5-6 | R3 | No |
| Backend API Development | Week 5-8 | R3 | No |
| Integrating Google Calendar for Scheduling | Week 7-8 | R3 | No |
| **Phase 4: Testing** |  |  |  |
| Unit Testing for Bots & APIs | Week 9 | R4 | No |
| Integration Testing in Slack & MS Teams | Week 9 | R4 | No |
| User Acceptance Testing (UAT) | Week 10 | R4 | No |
| **Phase 5: Deployment & Monitoring** |  |  |  |
| Deploying Slack & MS Teams Bots | Week 11 | R5 | No |
| Monitoring & Post-Deployment Fixes | Week 12 | R5 | No |

### Module Responsibilities & Progress Tracking

| Module | Responsible Members | Tasks | Progress |
| --- | --- | --- | --- |
| **Slack BOT** | Ayush, Aryan | POC,AI Integrations | Week-1: , Week-2-3 |
| **MS Teams BOT** | Joshita | POC | Week-2: , Week-3 |
| **Calender API** | Prajna | POC | week 2,3 |