**Project Proposal: Slack-Bot and MS Teams-Bot Integration**

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## 1. Project Overview

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.

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## 2. Objectives

1. **Streamlined User Experience:** Provide users with direct access to uExcelerate functionalities within Slack and MS Teams.
2. **Improved Productivity:** Reduce the need to switch platforms by integrating key workflows.
3. **User Engagement:** Foster higher user engagement through contextual, real-time assistance in collaboration tools.
4. **Scalable Architecture:** Ensure the bot architecture supports future feature extensions.

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## 3. Features

**Key Actions Supported by the Bot:**

1. **Coach Search:**
   - Users can search for available coaches based on filters like expertise, availability, and rating.
2. **Create Action:**
   - Users can define actions/tasks during coaching sessions directly through the bot interface.
3. **Create Goal:**
   - Users can create SMART goals, associating them with a coach or a coaching session.
4. **Schedule New Coaching Session:**
   - Users can view coach availability and book a new session.

**Additional Features:**

- **Authentication:** Single Sign-On (SSO) for secure access.
- **Notifications:** Reminders for upcoming sessions, goal deadlines, or action items.
- **Interactive Cards:** Use of rich interactive cards for Slack and Teams to display options and forms.

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## 4. Technology Stack

**Frontend (Bot Interface):**

- **Slack SDK** for Slack bot development.
- **Microsoft Bot Framework SDK** for MS Teams integration.

**Backend:**

- **Node.js** for API development.
- **Express.js** for server-side logic.
- **PostgreSQL** for data storage.
- **Sequelize** as ORM for database interactions.

**Integrations:**

- **uExcelerate APIs** for coach search, goal creation, and session scheduling.
- **Google Calendar and Outlook APIs** for scheduling integration.

**Hosting:**

- **AWS Lambda** for serverless bot hosting.
- **AWS API Gateway** for exposing bot APIs.

**Authentication:**

- **OAuth 2.0** for secure user authentication in Slack and MS Teams.

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## 5. Architecture

1. **User Interaction:**
   - User sends a command or interacts with the bot in Slack/MS Teams.

2. **Bot Logic:**
    ○ Bot processes the command using predefined intents and triggers.
3. **Backend:**
    ○ Backend APIs handle actions like fetching coach data, creating goals, or scheduling sessions.
4. **uExcelerate Integration:**
    ○ Backend interacts with uExcelerate APIs to perform requested operations.
5. **Response:**
    ○ Bot sends the response back to the user with the requested data or action confirmation.

## 6. Project Phases

### Phase 1: Planning and Requirements (2 Weeks)

- Requirement gathering for bot capabilities.
- Finalize Slack and MS Teams bot architecture.
- API mapping with uExcelerate.

### Phase 2: Design and Prototyping (2 Weeks)

- Design bot workflows for each action.
- Create prototypes for interactive cards and forms.

### Phase 3: Development (4 Weeks)

- Develop Slack and MS Teams bots.
- Implement backend APIs for bot communication.
- Integrate uExcelerate functionalities (Coach Search, Create Goal, etc.).

### Phase 4: Testing (2 Weeks)

- Unit testing of bot commands and backend APIs.
- Integration testing with Slack/MS Teams environments.
- User Acceptance Testing (UAT) with sample users.

### Phase 5: Deployment and Monitoring (1 Week)

- Deploy bots to Slack and MS Teams App Stores.

- Monitor bot usage and handle post-deployment issues.

## 7. Deliverables

1. Fully functional Slack-Bot and MS Teams-Bot integrated with uExcelerate.
2. Backend APIs supporting bot functionalities.
3. Documentation for bot commands, workflows, and API usage.
4. Deployment setup and post-launch support.

## 8. Timeline

| Phase | Duration |
|---|---|
| Planning | 2 Weeks |
| Design and Prototyping | 2 Weeks |
| Development | 4 Weeks |
| Testing | 2 Weeks |
| Deployment | 1 Week |
| **Total Duration** | **11 Weeks** |

### 9. Conclusion

Integrating Slack and MS Teams bots with uExcelerate will significantly enhance user engagement and simplify key workflows. By providing direct access to coach search, goal creation, and session scheduling from collaboration tools, this project will position uExcelerate as a leading platform for coaching and development.