

PROJECT 1 – TOPIC 7 – GROUP 12

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1 **Learn about the Slack API:**

- Understanding the available methods and endpoints for interacting with the Slack service.
- For instances: retrieving user and channel information, creating channels, adding users, and performing other necessary actions

2 **Learn about the AirTable API:**

- Similarly, explore the AirTable API document to understand how to interact with the AirTable service.
- Focusing on data synchronization and integration capabilities, as syncing Slack data with AirTable

3 **Design program:**

- Plan the structure and classes of program. Identify the necessary data models and functionalities required to achieve the project objectives.
- Considering using appropriate design patterns and abstraction techniques to ensure maintainability and extensibility.

4 **Implement Slack integration:**

- Write code to interact with the Slack API.
- Utilize the provided methods to retrieve user and channel information, create channels, add users, and schedule tasks for data synchronization between Slack and AirTable.

5 **Implement AirTable integration:**

- Write code to interact with the AirTable API.
- Implement the necessary methods to authenticate, retrieve, update, and sync data between Slack and AirTable.

6 **Test and debug:**

- Test program thoroughly to ensure it functions as expected. Perform unit testing for individual components and integration testing to verify the synchronization between Slack and AirTable.
- Analyze and assess potential risks for application in order to identify security vulnerabilities and determine appropriate solutions. Refine and optimize: Review the code for any improvements, optimizations, or potential enhancements. Consider factors such as performance, error handling, and scalability.

7 **Document project:**

- Create documentation that describes how to use program, including any setup instructions, configuration requirements, and usage examples.

8 **Deploy and showcase project:**

- Deploy program to a production environment and demonstrate its functionality.
- Presenting project, gathering feedback, and reflecting on learning experience