# Chatbot Deployment withIBM Cloud Watson Assistant

PHASE 4

# **Team Members**

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Integrating a chatbot with Facebook Messenger and Slack involves using their respective APIs and ensuring a seamless conversation flow. Below are the steps to continue building your chatbot in Phase 4: Development Part 2:

### 1. Set Up Developer Accounts:

- For Facebook Messenger, you'll need to create a Facebook Developer account, set up a new app, and configure the Messenger platform.
- For Slack, create a Slack App and set up the necessary permissions and features.

### 2. Configure Webhooks:

- In both platforms, you'll need to configure webhooks to receive and send messages. Webhooks are HTTP endpoints that allow your chatbot to communicate with the messaging platforms.

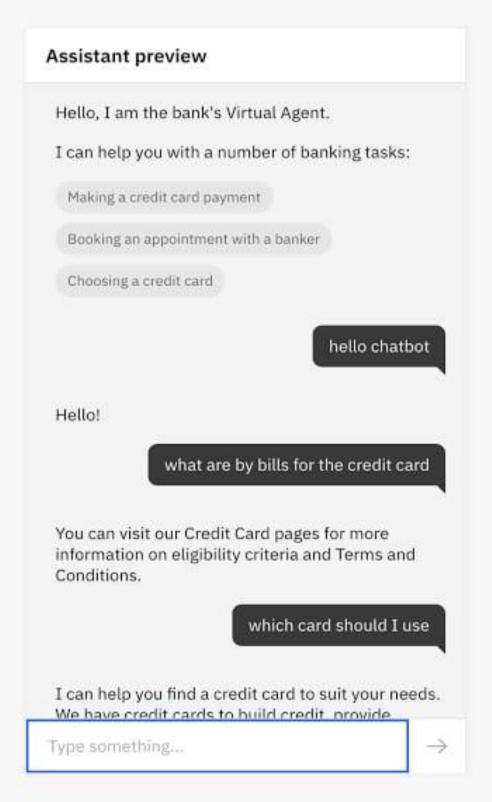
### 3. Implement Authentication:

- For Facebook Messenger, implement user authentication using Facebook's OAuth or using a bot token.
- For Slack, ensure your app can authenticate users and handle tokens securely.

### 4. Build Message Handlers:

- Create message handling logic for both platforms. When a message is received, your chatbot should parse the message and generate an appropriate response.
- Ensure your chatbot can understand natural language and respond accordingly.

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### 5. Database Integration (Optional):

- If your chatbot requires a database to store user data or conversation history, integrate it with a database system like MySQL, MongoDB, or any other suitable database.

### 6. Refine Responses:

- Continuously refine your chatbot's responses. You can use Natural Language Processing (NLP) techniques to make the responses more informative and human-like.
- Handle a wide range of user inputs, including greetings, queries, and commands.

### 7. Testing:

- Thoroughly test your chatbot on both Facebook Messenger and Slack to ensure it handles conversations smoothly and provides accurate responses.
  - Conduct user testing to gather feedback and make improvements.

### 8. Error Handling:

- Implement error handling to gracefully deal with unexpected user inputs or system issues.
  - Provide meaningful error messages to guide users.

### 9. Scalability and Performance:

- Ensure your chatbot is scalable to handle a growing user base.
- Monitor performance and optimize your code to reduce response times.

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## Assistant preview

Hello! I'm Jem, a chatbot who can get information from your team's Jira project. How can I help you?

### Show me Charlotte's issues

Total issues: 7 Top 5 issues

GM-197: Appointment scheduler (Charlotte

Lansley)

GM-189 : Style Guide (Charlotte Lansley) GM-148 : Color palette (Charlotte Lansley)

GM-136: Look into bootstrap scrollspy for docs

page (Charlotte Lansley)

GM-108: Finishing off Menu (Charlotte Lansley)

Type something...

### 10. Security and Privacy:

- Take security seriously. Protect user data, handle user credentials securely, and follow best practices for data encryption.
  - Comply with privacy regulations like GDPR to protect user information.

### 11. Compliance:

- Review the terms and conditions of Facebook Messenger and Slack and ensure your chatbot complies with their policies and guidelines.

### 12. Deployment:

- Deploy your chatbot to a production environment, and ensure it's accessible 24/7.

### 13. Monitoring and Maintenance:

- -Implement monitoring to keep an eye on your chatbot's performance and user interactions.
- -Regularly update and maintain your chatbot, adding new features or making improvements based on user feedback.

Remember that integrating your chatbot with multiple platforms requires different API integration for each platform. Facebook Messenger and Slack have their own unique ways of interacting with chatbots. It's important to familiarize yourself with their respective documentation and best practices to ensure a successful integration.