

PROJECT DEVELOPMENT PHASE

Topic	Exception handling
Team ID	NM2023TMID02308

Exception handling is an important aspect of any software solution, including those designed for creating sponsored Instagram posts. Handling exceptions ensures that your application can gracefully recover from errors or unexpected situations, providing a better user experience and preventing crashes. Here are some common scenarios where exception handling can be applied in such a solution:

API Rate Limit Exceeded	If your solution interacts with Instagram's API, there may be rate limits on the number of requests you can make in a given time frame. When this limit is exceeded, you should catch the rate limit exceeded exception and implement strategies like exponential backoff or queueing requests to avoid disruptions.
Network Connectivity Issues	If there are network connectivity issues, such as a lack of internet connection or server unavailability, you should catch network-related

	exceptions and provide appropriate error messages to the user.
Invalid User Inputs	Users may input incorrect data, such as invalid usernames, hashtags, or URLs. Implement input validation and catch exceptions to provide feedback to the user on how to correct their input.
Authentication Errors	If the solution requires user authentication (e.g., OAuth for Instagram), handle authentication errors like invalid tokens, expired tokens, or revoked access, and guide the user on how to reauthenticate.
Data Storage Errors	If you're saving data, like scheduled posts or campaign information, handle exceptions related to database or file system errors. This ensures data integrity and reliability.
Third-Party Service Errors	If your solution integrates with third-party services, like analytics or scheduling tools, handle exceptions related to service outages or errors to

	prevent data loss or disruptions.
Content Creation Errors	Errors can occur during the content creation process, such as image or video rendering failures. Handle these exceptions and provide clear error messages to the user.
Unresponsive APIs	Sometimes, the Instagram API or other third-party APIs may become unresponsive. Implement timeout mechanisms and error handling for these situations.
Content Approval Workflow	If your solution includes a content approval workflow, handle exceptions related to the approval process, such as rejected content.
Content Publishing Failures	If a sponsored post fails to be published for any reason, capture the error and provide feedback to the user, along with instructions on how to resolve the issue.