PROJECT DESIGN PHASE-2

DEBUGGING & TRACEABILITY

TEAM ID	**NM2023TMID02721**
PROJECT NAME	**To Create a Reel Design using Canva**
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Debugging and traceability are essential aspects of software development and maintenance, and they are crucial for maintaining the reliability and performance of complex systems like Instagram. However, the specific methods and tools used for debugging and traceability in Instagram's infrastructure are not publicly disclosed. The information I can provide is based on general industry practices.

Logging: Developers typically add logging statements to their code to capture information about the application's behavior, errors, and performance metrics. These logs can help identify issues.

Error Tracking Tools: Instagram may use error tracking and monitoring tools that automatically collect and report errors in real-time, allowing engineers to respond quickly.

Testing Environments: Creating test environments that mimic the production system can help developers replicate and debug issues without affecting real users.

Code Reviews: Peer code reviews are an integral part of the development process, where experienced developers review code changes to catch issues early.

Traceability: refers to the ability to trace the flow of data or requests through a complex system. It's crucial for understanding how data moves through the platform and for diagnosing issues. Instagram might use techniques like:

Request Tracing: Tracking individual user requests or transactions as they move through the system can provide insight into performance bottlenecks and errors.

Instagram's specific approach to debugging and traceability will be tailored to its unique infrastructure and needs, and these practices would evolve over time as the platform grows and changes. Keep in mind that details of their internal processes and tools are not publicly disclosed for security and competitive reasons.

```
var getPicturesForTag = function (tag) {
  var query = {
    count: 10
  }
  var url = 'https://api.instagram.com/v1/tags/' + tag + '/media/recent'
  var settings = {
    method: 'GET',
    url: url,
    data: query
  }
  sendRequest(settings)
}

var sendRequest = function (settings) {
  jQuery.ajax(settings).done(function (response) {
    console.log(response)
  })
}
```

```
<?php

// Replace YOUR_APP_ID and YOUR_APP_SECRET with your actual app ID and app secret
$app_id = 'YOUR_APP_ID';
$app_secret = 'YOUR_APP_SECRET';

// Replace YOUR_HASHTAG with the hashtag you want to search for
$hashtag = 'YOUR_HASHTAG';

// Get an access token by making a POST request to the Instagram API
$access_token_url = 'https://api.instagram.com/oauth/access_token';
$access_token_data = [
  'client_id' => $app_id,
  'client_secret' => $app_secret,
  'grant_type' => 'client_credentials',
];

$curl = curl_init($access_token_url);
curl_setopt($curl, CURLOPT_POST, true);
curl_setopt($curl, CURLOPT_POSTFIELDS, $access_token_data);
curl_setopt($curl, CURLOPT_RETURNTRANSFER, 1);
```