

Performance Test Plan Template

Revision 28/06/2021

Purpose:	We will try to verify if the Reddit application can endure a normal and anticipated use of user. We will keep an eye on the response times and the error rate.
Website Description:	Reddit is a community website for discussion and social news. Thus, the most popular links of the moment are displayed on the homepage. Its community is gathered around a culture specific to the history of the site and the Internet in general.
Performance Criteria	
Goals:	With Load Testing we will try to verify if the application can endure a normal and anticipated use. We will keep an eye on the response times and the error rate.
Test Type:	<p>Loading Test</p> <hr/> <p>The purpose of this test is to determine the number of simultaneous and/or anticipated users that the system can support without experiencing significant service degradation.</p>
Failure Criteria:	A test run will be considered "failed" if any of the following conditions are met: <ul style="list-style-type: none"> • The application does not handle the required amount of load, generating errors or performance issues and response times. • Loss of Reddit's accessibility to customers
Validation Criteria :	A test run will be considered "Pass" if one of the following conditions is met: <ul style="list-style-type: none"> • The error rate should be below 5% • Response time should not vary and be stable
Technical Requirements	
Environment:	<p>Programming Language:</p> <ul style="list-style-type: none"> • Python <p>HTTP Server Technologies:</p> <ul style="list-style-type: none"> • NGINX / HAProxy <p>Server Libraries:</p> <ul style="list-style-type: none"> • Pylons <p>Databases and NoSQL Datastores:</p> <ul style="list-style-type: none"> • MemCached / PostgreSQL / Cassandra <p>Server Software:</p> <ul style="list-style-type: none"> • RabbitMq <p>Cloud/Hardware Infrastructure:</p> <ul style="list-style-type: none"> • Amazon Web Service

3rd Party APIs/Services:

- STRIPE

Credentials:**Telemetry:**

We need to measure some metrics:

- CPU/Memory/Disk usage
- Error rate
- Response Time

Load Profile**User Lifecycle:**

Only registered users and logged users have access to the file downloader system.

Steps:

- Home page (Large volume of data received/low volume of data sent).
- Login or registration (low volume of data received and sent).
- Search on reddit the publication r/france (large volume of data received and sent).
- Click on the discussion (large volume of data received and sent)

Concurrency:

The number of users will normally stagnate and lead to a search rate equal to the number of users.

Post-Test Analysis**Data collection:****Reporting:****Summary:**