**Speer** QA Testing Engineer Assessment

Part 1 - Please provide a **Google Doc link** document for this stage (please ensure that the link can be viewed by anyone).

Write a simple test plan for either of these:

1) Email sending service

--------OR--------

2) SMS sending service

Include detailed explanations of:

1. What all scenarios will you cover?

Ans :

Email -

* Proper visibility of images maintaining alignment with the text.
* Visibility of the complete email - Is the complete email body visible in the email, it should not be truncated for large emails.
* Background consistency - Is the background colour consistent across different browser and OS combinations?
* Consistency of column width across browser combinations.
* Email appearance to look clean enough to read when viewed on different browsers.
* Check whether the HTML email renders properly on different clients and devices especially with different resolution devices like mobiles, tabs, small and big workstations.
* Default email template should not have any typing mistakes.
* Block and Unblock images
* Interactive / Dynamic emails
* Internationalization testing of the emails

1. How will you test attachments and images in the email?

Ans :

Attachments -

* Attachments icons should be visible on emails containing attachments in the inbox.
* Attachments should be visible on top or bottom to open and view the attachments.
* Proper icons like word, pdfs etc. should be visible as attachments in open view of the email
* Attachment size should be visible along with the type of attachment
* Multiple attachments should be visible properly and scroll or multiple lines should be provided in case of many attachments not fitting in one line

Images-

* Images could be part of body of email or can be as attachment. Images as attachments should be handled as explained in attachments section above
* Images in the body of email should be aligned with the text
* Check for blocked and unblocked images
* Images should be visible equally well on all types of device of different resolution sizes like mobiles, tabs and big workstations
* Images should visible on all types of browsers in email

1. How will you test templating?

Ans:

* Provide different inputs to the fields template and observe the email look
* Check with different locales
* All the fields templates must get replaced with the inputs
* Fonts and colours of template fields should match with the existing email body text.
* If dates field are templated should pick right dates.

4) How can this process be automated? Code is not required for this question, however, include brief explanations of the steps, packages/libraries you might use and why.

Ans:

* This can be automated via Selenium
* Below packages will be required
  + org.openqa.selenium.- provides access the Selenium capabilities for automating web tests
  + org.openqa.selenium.firefox.FirefoxDriver – enables Firefox browser to run tests
  + java.util.List – Java List utility
  + java.util.concurrent.TimeUnit – Java interface to specify a time duration before the execution of our code.
  + testng- for testng frameworks
  + maven – build framework
* Code shall be written in Selenium Webdriver 3.0 tool, in JAVA 8, using TestNG framework
* Automate scenarios via Java and Selenium apis.

Part 2 - Please provide a link to a public Github/GitLab repository.

Feel free to use any language/framework you feel comfortable with.

Write a simple script which:

1) Accepts a Wikipedia link - return/throw an error if the link is not a valid wiki link

2) Accepts a valid integer between 1 to 20 - call it n

3) Scrape the link provided in Step 1, for all wiki links embedded in the page and store them in a data structure of your choice.

4) Repeat Step 3 for all newly found links and store them in the same data structure.

5) This process should terminate after n cycles.

Optional:

1) Optimize your code not to visit any links you've already visited.

2) Write the results ( all found links, total count, unique count ) to a CSV/JSON file.