Tools & Technology:

The infrastructure we will require can all be purchased via Microsoft Azure. The fundamental backbone of the server will be an Application Server, SQL Server, mail server, IIS Server and file server; with 2 backup servers as a redundancy solution. [Microsoft.com. (2019)]

IIS and Application server will host and publish the website for the webpage for clients to log into and register to use the service [VUOLLET, P. (2018).]. The information entered and stored from there will be recorded on the SQL server and any attachments will be stored on the file server.

The development of the application will be a screen capture tool that can read the webpage code from a screenshot. It will ask use JAVA or HTML5 to open up a webpage inside the web application and ask the user to crop the area they wish to monitor; the cropping tool will decode the area and store all the code behind the page and do a constant ping to the original page. [Coleman, A. (2014)]

The application will use a mail relay agent and send out a notification to the designated email address to notify user once a change has been detected.

Reference:

Coleman, A. (2014). *How Web Apps Work — Simple CodeIgniter App*. [online] Self-Taught Coders. Available at: https://selftaughtcoders.com/how-web-apps-work/ [Accessed 15 Apr. 2021].

Microsoft.com. (2019). *Microsoft Azure Cloud Computing Platform & Services*. [online] Available at: https://azure.microsoft.com/ [Accessed 15 Apr. 2021].

VUOLLET, P. (2018). *IIS Web Server: (Internet Information Services)*. [online] Stackify. Available at: https://stackify.com/iis-web-server/ [Accessed 15 Apr. 2021].