Web Technologies

Coursework Part One

Daniel Russell

# **Summary**

A local Scottish charity “Scots Politique” wants a web-based information system to encourage the general public of Scotland to take interest in policy and the current government of the country. The proposed information system is to provide statistics about a given region via entering a postcode as well as providing details about their elected MSP for that region.

# **Research**

Pre-existing API that seem appropriate to use for this project are already provided by most government systems in the UK such as by Gov.uk, Labour Market Information for all and the Scottish parliament where an application can make a HTTP get request to a server and receive a response containing the relevant information in JSON formatting.

Other forms of software/API that could be utilized would be Postman which is made to simplify the process of creating requests for a wide array of formats as well as offering the option to manage the data received along with automated testing, version control and a workspace.

Another API would be CURL or Client URL is an open source code library primarily used in scripts and command lines used to handle the transfer of data of many formats and types.

A similar website that mirrors the request this sort of information system would be the Scottish parliaments MSP finder tool which uses a map API breaking down each region of Scotland into coloured sections allowing the user to select a region and return a further breakdown showing each constituency’s area of influence in that region. Selecting a constituency displays the current MSP.

# **Aims**

For now, the charity requests only the following to be implemented as more of the site will be built on in the future.

* Allow user to enter postcode to view their current elect MSP.
* Allow user to enter postcode to view statistics about the amount of the population working a specific job in their region.
* Allow user to enter postcode to view statistics about the current salary of a specific job and rate of change.

# **Target Market**

This information system is most likely to be used by Scottish citizens who hear of the Scottish charity coming from varying political interest and political leanings.

Likely going to be 18 years above. (Voting age)

Mainly for those curious about the MSP elected for a select region or their locally elect MSP or may just desire easy access to statistics for their local or a select region.

# **User stories**

User Story 1: Phil the railway worker wants to input his postcode to view his local MSP’s contact details.

User story 2: Dhana the social care worker wants to input her postcode to view the estimated salary for her job category.

User story 3: Trevor the student wants to select the region of south Lanarkshire to get a count of the population working in the Animal Care.

User story 4: Joel the teacher wants to select a region to view their current elect MSP.

# **Functional**

* User should be able to enter a postcode to view the local constituency.
* User should be able to enter a postcode to view the current elect MSP.
* User should be able to enter a postcode to view proportion of the population working for a specific job in that region.
* User should be able to enter a postcode to view the salary for a specific job.
* User should be able to enter a postcode to view the rate of change in salary for a specific job.
* User should be able to manually select a region from Scotland.
* User should be able to manually select a constituency from a select region.
* Dynamic styling.
* Simplified Interface.

# **Non functional**

* Accessibility options.
* Efficient use of resources to maximise performance.
* Cross platform Desktop, Tablet and mobile.
* Maintainable for future expansion.

# **Bibliography**

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