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| **Implementing improved methods of regional care through the use of IoT, Mobile Devices and Website Applications**  Aaron Stones  BSc Computing with Honours, 2020 |

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# Table of Tables

# Acknowledgements

# Abstract

300 words

Usually read first by the reader

Write this last

Summarise what you did, results and conclusions

Not an intro so no references

# Abbreviations, Symbols and Notation

If required

# Chapter 1 – Introduction

**750 – 800 words + 133 words per section**

**Set the scene**

**Background to and purpose of the investigation**

**Scope**

**Project aims/research questions**

**Likely to be more focussed than the proposal**

**End with an overview of the remaining chapters**

Within the United Kingdom right now it is estimated that around 410,000 people live inside ‘Care Homes’ (GOV.UK, 2019). Around 10% of these residents have primary health options, this means the patient is no longer able to look after themselves and have been admitted to residential care to protect them. A following 49% of the residents in ‘Care Homes’ are LA-funded, this is a scheme setup by the United Kingdom government to contribute to a quarter of the living costs for these residents (GOV.UK, 2019).

However, it has been reported within the media recently that due to an ever increasing and ageing population, a need for patients to be admitted due to concerns for their health (primary options) out-ways the need for these forms of care. This is in comparison to residents on LA-funded schemes, who could achieve an equally adequate or even better form of care from their own homes through the use of technology. This technology could be used to manage the different conditions patients may have or used to detect these conditions early.

Within these ‘Care Homes’ many patients are living with both; early and advanced neurological brain conditions and require regular assessment from Nurses and Doctors to assess the progression of their disease and any notable changes. This only happens if a patient has been correctly diagnosed. If Parkinson’s is taken as an example according to WebMD – “It has been estimated that, especially in its early stages, nearly 40% of people with Parkinson’s Disease may not be diagnosed, and as many as 25% are misdiagnosed.” (WebMD, 2019) This shows a lack of ability to accurately detect this conditions and so accurate care cannot be provided. The main means for the detection of degrading neurological conditions is the use of CT scans, which are both time consuming and expensive to public bodies like the NHS (National Health Service), with each scan costing around 609.70 pounds according to costevaluation.com (Costevaluation.com, 2019). This is a necessity to accurately detect neurological conditions, but are in high demand. Mobile Phones and IoT devices could be used to run small tests before hand by the suspected sufferers to give an early prognosis of these conditions where then the CT scan is only a formality to confirm what is already known.

# Chapter 2 – Literature Review

1700 – 1850 words +

A record of important contributions within your field of work by others and a critical evaluation of the work to date

A more in-depth and focussed discussion than in your proposal

Focus on tech now being used

Current state of play

Start with short intro of what chapter is about

Refer to support argument

Lead reader to same point as you

End with summary of significant points leading to methodology

# Chapter 3 – Methodology

2750-3000 words

Possible for a worker in your field to repeat your method and results

A description of how the project was carried out

Justify the reasons for the step taken

May include:

* Prep work
* Stat analysis
* Experiments
* Design Approach
* Methods used to create/build software/hardware
* Investigation

Ethical considerations

Interviews/Focus Groups/Questionnaires and their design

How data is collected and evaluated

# Chapter 4 – Results

500-800 words

A factual presentation of your results which relate to the project aim

A description of the completed software/hardware and analysis along with test/evaluations/analysis results

Suitably present in:

* Tables/Charts
* Statistics
* Illustrations
* If too many use appendices

Put raw data in appendices

Don’t dwell on discussion of issues. Save to discussion chapter

# Chapter 5 – Discussion

2250-2500 words

Evaluate your findings/results

Comment on their significance in relation to the previous work on the same topic

Refer back to your literature review where appropriate

Use the aims and objectives outlined in your proposal/introduction if appropriate to aid your evaluation, referring back to initial project requirements

# Chapter 6 – Conclusions & Future Work

750-1000 words

What conclusions can you draw from your investigation?

What are the implications of what you have discovered?

How might further work in this area be continued?

# List of References

List all works used and refer using Harvard style – CITE THEM RITE

Write references in text and add to references section while you are writing

# Bibliography

List works that you have considered but do not refer to in text. Use Harvard

# Appendices

Used to stop text being cluttered and broken up:

* Tables of extensive data
* Code
* Legal decisions or laws
* Lengthy quotations
* Copies of sample questionnaires
* Start each appendix on a separate page and label A,B,C etc