Honours Project Table of contents/ dissertation plan

1. Title Page
2. Abstract - ~300 words.
   1. Short summary of IOT
   2. Short summary of practical aspects carried out – types of devices/ pen testing/ techniques.
   3. Summary of results
   4. Summary of conclusions
   5. Key words

**MONDAY / TUESDAY/ WEDNESDAY**

1. Introduction ~750 – ~1000 words.
   1. Background – set the scene
      1. What is IOT
         1. Definition
         2. History – not a new concept
      2. Introduce concept of the smart home
      3. Internet as we know it – fourth industrial revolution
      4. Business implications / future projections / market split and trends
      5. What is penetration testing
      6. Relate penetration testing to IOT
      7. What are the iot devices used in this project - technologies
      8. Relate to overall project aims
      9. Relate to research question.
      10. End with overview of remaining chapters in dissertation
2. Literature review ~ 1500-~2000
   1. Introduction to lit review
      1. Demonstrate Current state of play of IOT through references
         1. Business costs
         2. Hacking costs /losses
         3. Future trend
      2. Illustrate important contributions of IOT
         1. Critically evaluate each reference
         2. Build upon reference – what I am going to do to further / expand research
      3. Technologies tested in previous research
         1. Compare with technologies tested in this project
      4. Summarise main points – relate to methodology
      5. Discuss methodology of this project (OWASP) and explain how no past research has investigated IOT in the context of a smart home and different types of devices and technologies.

**Thursday**

1. Methodology – Practical Aspects ~2500 words.
   1. Case study of each device
      1. Type of device
      2. How it works – technologies
      3. Methods used to test
      4. Reproduction of method – screenshots?
   2. How data was collected / evaluated
   3. Include any ethical considerations.
2. Results ~500 - ~1000 words
   1. Present table of vulnerabilities – tick box
   2. Graph of the number of devices found to have flaws / different flaws found

**FRIDAY**

1. Discussion ~2000 - ~2500
   1. Evaluate each IOT device case study
   2. Relate to previous work carried out on IOT devices –-> lit review
   3. Discuss real world implications
   4. Countermeasures?

**SATURDAY**

1. Conclusion ~750 - ~1000 words
   1. Draw all necessary conclusions
      1. IOT insecure in general?
   2. What are the real world implications of findings
   3. Recommendations
   4. Further work
2. Appendices
   1. Raw data
   2. Scan outputs ETC
3. References
4. Bibliography
   1. Any non-directly referenced sources

**Plan**

1. Literature review
2. Methodology
3. Results
4. Discussion
5. Introduction
6. Conclusion
7. Abstract

* Reference as I go
* For bibliography as sources discovered
* Evidence practical work through screenshots and outputs as carried out