Results and Conclusion

Year 3 COMP321 – ISI Report

✓ **Chapter 1. Introduction**
Section 1.1 Overview
Section 1.2 Objectives

✓ **Chapter 2. Background and Related Work**
Section 2.1 Background
Section 2.2 Related work

Chapter 3. System Design
Section 3.1 Data modeling
Section 3.2 Dynamic modeling

Chapter 4. System Implementation
Section 4.1 Architecture
Section 4.2 Module design

Chapter 5. Results and Discussion
Section 5.1 Project Outcome
Section 5.2 Testing

Chapter 6. Conclusion and Further Work

Appendix.
References
Project plans (Gantt Chart, Work-Breakdown Structure, etc.)
Peer assessment form

Results and Discussion: the purpose

- The Results and Discussion section is the most substantial part of the report.
- Consider this section to be the “meat” of the report while other sections constitute the rest of the “ingredients”.
- This is where the results of the project are reported and discussed.
- Any significance in the work reported here must be made clear by detailed discussions.
- Results sections make extensive use of graphs, tables and figures to present data effectively.
  - Remember that all figures and tables that you include within you report should be clearly and uniquely labelled with a number and a short description.
  - When labelling a figure it is usual to put the caption beneath the figure.
  - When labelling a table, it is often better to place the caption above the table.

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Results and Discussion: how to handle the large amount of raw data

- If the study has produced a large amount of raw data, do not present all of it in the results section.
- Instead, present only the information most appropriate to your audience's purpose in reading the document, summarizing other key information in graphs and figures.
- If appropriate, include your raw data in an appendix, referring to them within your text.

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Results and Discussion: what to include

- Evidence is always important for supporting your argument.
- Do they match the expectation in the introduction?
- Present your measurements in this section
  - Gives an insightful analysis on the experimental data
  - Make good use of table, figures, graph

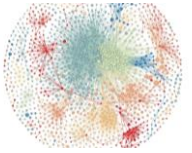

Fig. 7 Result visualized by the Fruchterman Reingold layout

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Results and Discussion: what to include

- Discuss the data obtained from your implementation/ experiment.
  - *Table 3 lists high-level statistics and social graph measurements on the ten largest regional networks in Facebook data set.*
  - *It was found that the average path length is 4.63 similar to other regional networks. The radius is low but the diameter is high when compared to other large network graphs. The clustering coefficient shows graph neighborhoods of users contains dense structure.*

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Test Case Design for ISI report

References:

- https://www.tutorialspoint.com/software_testing_dictionary/test_case_design_technique.htm
- https://www.guru99.com/test-case.html
- https://en.wikipedia.org/wiki/Unit_testing
- https://www.guru99.com/testing-rest-api-manually.html

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Best Practice for writing good Test Case Example

- **Create Test Case keeping in mind the end user perspective**
- **Name the test case id such that they are identified easily while identifying a software requirement at a later stage.**
- **Avoid test case repetition.**
  - If a test case is needed for executing some other test case, call the test case by its test case id in the pre-condition column
- **Implement Testing Techniques**
  - **Boundary Value Analysis (BVA):** It defines the testing of boundaries for a specified range of values.
  - **State Transition Technique:** Used when software behavior changes from one state to another following particular action.
  - **Error Guessing Technique:** This is guessing/anticipating the error that may arise while doing manual testing. This is not a formal method and takes advantages of a tester's experience with the application

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Purpose of Conclusion

- Technical writing should always end with a conclusion in order to provide readers with a final outcome of the presented data.
- A **conclusion** is a presentation of key points and final outcomes based on collected data.
- Conclusions should remind the readers what they have learned and should answer the main questions of the document.

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Conclusion And Further Work

- Briefly summarize the main contributions of your work.
  - Restating the hypotheses and describing how the results met those expectations
- Recommendations/ Further Work
  - What would you recommend to do next if your project continues
  - Provide a good topic related to this work

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Structure of Conclusion

- The structure of the conclusion should move from general to specific.
  - The first step is to present your general findings or points.
  - Once you've provided a general statement, it's time to get specific. Provide the results of individual measurements from your research. E.g.
  - Next, you want to make a conclusion or recommendation.

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Conclusion

- **Your Conclusion Should**
  - Summarize your main points
  - Reiterate the aims of the report
  - Realize your argument
  - Leave a strong impression on the reader
  - Recommend and suggest further research

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Conclusion

- Summarizing your main points
- Reiterating the aims of the report
- Realizing your argument
- Leaving a strong impression on the reader
- Recommending and suggesting further research

- **Summarizing your main points**
  - You need to provide an overview of the ideas in the main body of your essay

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Conclusion

- Summarizing your main points
- Reiterating the aims of the report
- Realizing your argument
- Leaving a strong impression on the reader
- Recommending and suggesting further research

- **Reiterating the aims of the report**
  - You can reaffirm the rationale for the report, emphasizing its purpose. Your reader can then decide whether you have fulfilled your aims.

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Conclusion

- Summarizing your main points
- Reiterating the aims of the report
- Realizing your argument
- Leaving a strong impression on the reader
- Recommending and suggesting further research

Realizing your argument

- Your conclusion should provide the last stage of your experiment/text/project, the realization or deduction from the data or completion of your project, where you show that what you are stating is based on the logical development from concrete evidences.

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Conclusion

- Summarizing your main points
- Reiterating the aims of the report
- Realizing your argument
- Leaving a strong impression on the reader
- Recommending and suggesting further research

Leaving a strong impression on the reader

- You want your reader to have a good sense of your overall project. Think about the lasting impression you want to give.

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Conclusion

- Summarizing your main points
- Reiterating the aims of the report
- Realizing your argument
- Leaving a strong impression on the reader
- Recommending and suggesting further research

- **Recommending and suggesting further research**
  - You may have some idea that contributes to a solution for particular problems you've discussed, and you may want to speculate about future directions in the field.

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Introductions & Conclusions

- Introductions and conclusions are important components of any essay.
- They work to book-end the argument made in the body paragraphs by first explaining what points will be made (in the introduction) and then summarizing what points were made (in the conclusion).

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Matching Introduction – Conclusion

Objective

The objectives of the project are shown as follows:

- Design and implement a crawler
- Provide practical recommendations to tackle the challenges during the crawling process
- Visualize and analyse the structure of the crawled network

Conclusion

In this report, the design and implementation of a crawler was developed.

Problems and solutions in the Facebook social network crawling process were analysed. The author believes that the crawling design and implementation concluded in this report shed light on future OSN studies, which will increasingly rely on crawled subgraphs.

Crawler result with statistic and graph view was presented. By visualizing and comparing social graphs, readers can gain a better understanding on Macao social network structure.

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Matching Introduction – Conclusion

Objective

This project contains the following objectives:

- Model Construction – use the room A322 of Macao Polytechnic Institute as the initial 3D model.
- Scene Rendering, such as texturing, lighting, shading, etc.
- Game Implementation – develop the interactivities between computer and users so that users can interact with the 3D scene like playing games.

Conclusion and Further Work

In conclusion, the part of Model Construction was finished via the 3D graphics software – SketchUp.

Some rendering on the models were completed as shown in the implementation and results chapters.

Afterwards, the Game Implementation part was developed through the game engine – Unity3D. The main concept of game implementation is collision detection, in addition to determining whether two objects have collided.

After the game Implementation part, some lighting control was added. Users can interact with the models such as walking around the room and jumping between objects.

Advanced lighting control, shadow and other interactions, such as opening the door, grabbing an object can be considered for future work.

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Appendix

- An appendix is any section that follows the body of the report (and the list of references, glossary, or list of symbols).
- Appendices provide a convenient way to convey information that is too bulky to be presented in the body or that will be of interest to only a small number of the report's reader. Examples included maps, large technical diagrams or charts, computer program, test data.
- This section keeps materials that is supportive to your report, but may interrupt readers if put inside the main text
- Graphs, Tables, anything that may help readers to understand your report
- It is best to use individual paging with each appendix. For example, pages in an Appendix B would be numbered B-1, B-2, B-3.

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Appendix

- Appendices, which are usually lettered rather than numbered (Appendix A, Appendix B, etc.) are listed in the table of contents and are referred to at the appropriate points in the body of the report.
- Therefore, they are accessible to any reader who wants to consult them.

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Appendix – Example

APPENDIX HTTP REQUEST CONTROL PARAMETERS

These are the HTTP Request control parameters description tables.

Table 4 Sina Weibo API Request Control Parameters

Parameter name	Essential	Data type	Description
source	false	string	Using OAuth authorized doesn't need this parameter, other authentication need to fill in this with the AppKey value.
access_token	false	string	Using OAuth authorized doesn't need this parameter, other authentication need to fill in this with system feedback access_token
lat	true	float	Latitude. Range : -90.0 to +90.0, +stand for northern latitude.
long	true	float	Longitude. Range : -180.0 to +180.0, +stand for east longitude.
range	false	int	Search range, meters, default 2000meters , maximum 11132 meters.
starttime	false	int	Start time , Unix time stamp

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Cite your reference

- The development of Tourism in Macao is growing rapidly. Many tourists are coming Macao from different places, mainly from Mainland China, Hong Kong, & Taiwan [1].
- ....
- On the other, the smartphone is emerging as the main technology platform in the mobile industry with the number of users expected to exceed one billion by 2014 [2]. According to the statistics of Skyhook [3], in February 2010, there are 4.6bn mobile phones available worldwide and the figure for smart-phone is rising. In mid 2010, 250,000 applications were available on Apple's store and 50,000 on Google Play.

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References

[1] Statistics Department of Macau (DSEC), Arrival Visitors, http://www.dsec.gov.mo/Statistic.aspx?lang=en-US&NodeGuid=251baebb-6e5b-4452-8ad1-7768eafc99ed, [April 2013]

[2] Media Post, Mobile – It's Not Just For Out-Of-Home Anymore, http://www.mediapost.com/, [October 2010].

[3] Skyhook, Location Apps Research, http://www.skyhookwireless.com/locationapps/, [October 2010].

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