PROJECT # 21

SUPERVISOR/S:	Dr Claire Timpany & Nic Vanderschantz
PROJECT TITLE:	Designing better reading materials with the help of eye-tracking
FIELD:	Design
DIVISION/SCHOOL:	HECS - Au Reikura School of Computing and Mathematical Sciences
PROJECT LOCATION:	Hamilton

PROJECT ABSTRACT:

In this project, the summer scholar will use eye-tracking analysis to improve long-form reading materials. Designers use a range of typographic emphasis (e.g., text size, text weight, and typeface choice) to help guide a reader through a document. An important feature of long-form documents is headings that form the structure of a document.

When readers are searching for specific information within a document, headings play an integral role in indicating where the content a reader might be seeking could potentially be found. Having clear and easily identifiable headings in the text makes this search process much easier for readers. We will use an eye-tracking study to create recommendations for the design of documents for easy search and skim reading.

Prior work has established that certain methods for typographic emphasis of headings are more beneficial to readers to help them to identify the information they are seeking in a passage of text. However, anecdotal evidence from participants in prior studies revealed that they could not articulate the reasons behind their decisions. The goal of this project is to use eye-tracking tools to continue this research and observe how the design of headings can impact how a reader finds information in a passage of text.

The student undertaking this research will begin by refining previously developed materials for a paired comparison study that will be conducted using eye-tracking. They will then recruit participants and conduct the study. The student will engage in analysis, interpretation, and presentation of the data they have collected. The student will benefit from the development of key research skills for use in design, human-computer interaction, information systems, and reading research and practices. This project will provide a stepping-stone to further postgraduate research opportunities as the student will be introduced to experiment design considerations and results analysis.

STUDENT SKILLS:
- Knowledge and interest in design and typography for long-form reading
- Interest in eye tracking research for reading
- Academic writing skills
- Poster design skills/experience

PROJECT TASKS:
1. Recruit participants
2. Conduct eye-tracking experiment
3. Analyse data from study
4. Research Poster

EXPECTED OUTCOMES:
- Student's Research Poster (as per clause 6 of the Scholarship regulations)
- Research poster communicating interim findings
- Insights into typographic heading presentation for long-format texts