Total

Family Name	
First Name	
Student Number	
Venue	
Seat Number	



No electronic/communication devices are permitted.

No exam materials may be removed from the exam room.

Computer Science and Software Engineering EXAMINATION

EXAMINATION			
End-of-year Examinations, 2018			
COSC368-18S2 (C) Humans and Computers			
Examination Duration: 120 minutes	For Examiner Use Only		
Exam Conditions:		Mark	
This is a closed book test.			
No calculators are permitted. No form of collaboration is permitted.			
Materials Permitted in the Exam Venue:			
None.			
Materials to be Supplied to Students:			
1 x Half-sized 8-page UC answer book			
Instructions to Students:			
There are 300 marks available in this test. This test is worth 30% of your course grade.			
Answer all questions. Partial credit will be given for partial answers.			
Check the number of marks allocated to each question, noted in brackets [] at the end of each question. Let this be your guide to the degree of detail expected for an answer and the amount of time you should spend on that question. Use the Exam Book provided for answering all questions.			

Questions Start on Page 3

- 1. [60 marks] General Terminology.
 - a) Explain the difference between a signifier and an affordance.
 - b) Explain the term cognitive load.
 - c) Explain the difference between **interaction design** and **visual design**.
 - d) Explain Fitt's Law and provide an example of design failure relating to this law.
 - e) Explain the term wayfinding and how it is used in designing interactive systems.
 - f) Explain what a **design system** is and what components they are typically comprised of.
- 2. [30 marks] Gestalt Principles.

Define and draw examples of the following key Gestalt principles:

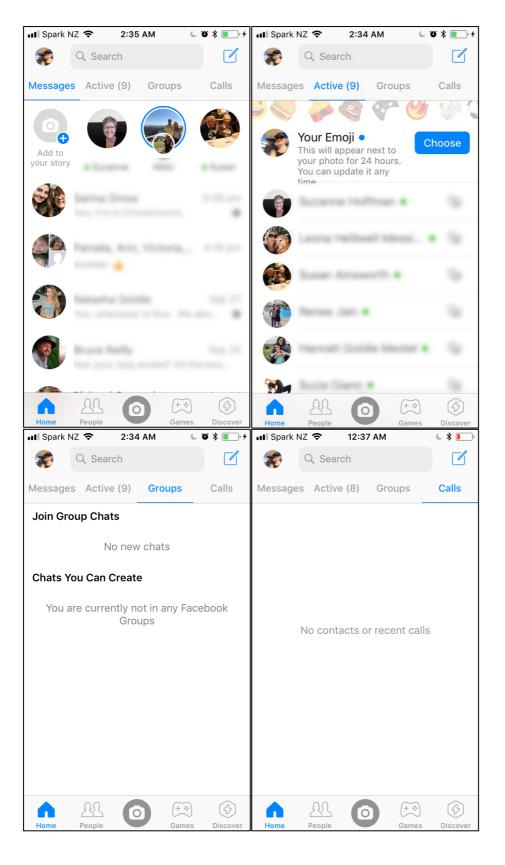
- a) Proximity
- b) Continuity
- c) Closure
- d) Symmetry
- e) Figure and Ground
- 3. [50 marks] Design Evaluation.

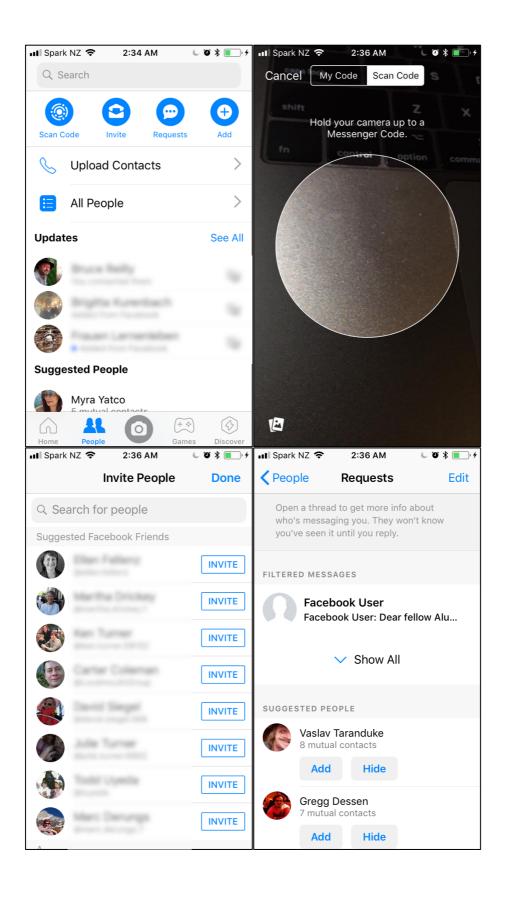
You are in the process of building a new web application and you are anxious to test the it with endusers but you are getting resistance from your boss and colleagues.

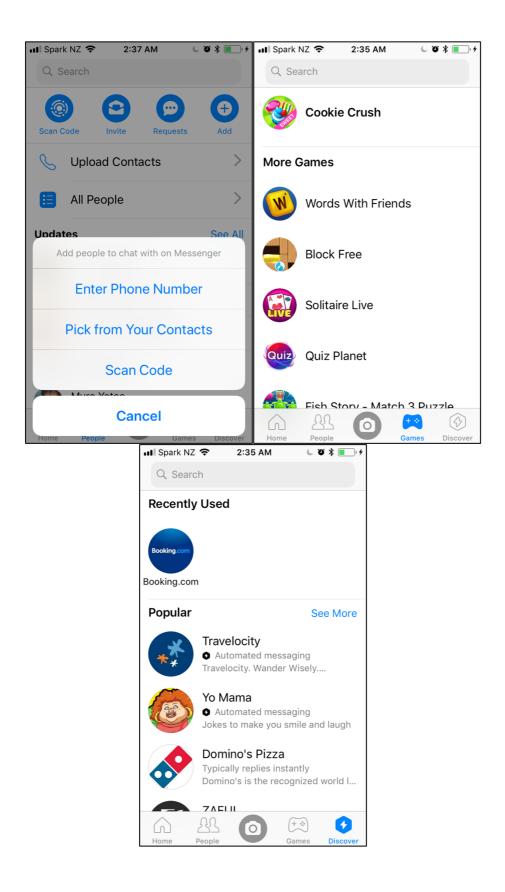
- a) Explain why it is so important to getting feedback from user. [10 marks]
- b) Explain what is involved in running a usability study following Steve Krug's DIY approach. [40 marks]

4. [75 marks] Conceptual Model.

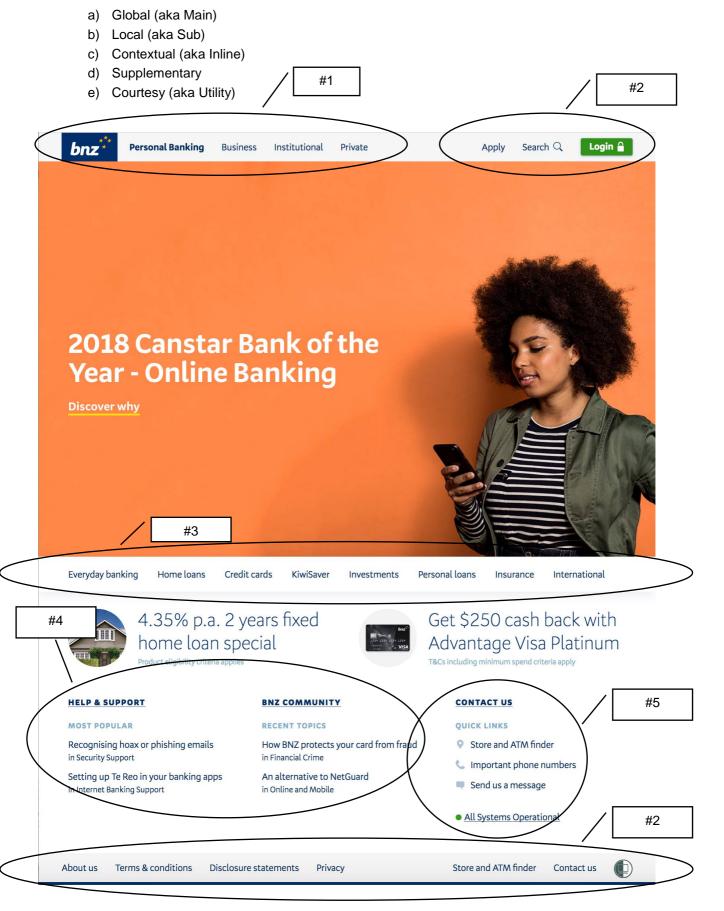
A well-designed application surfaces the conceptual model in the UI. From the UI screens of the application below, reverse engineer the conceptual model. Include all <u>four components of a conceptual model</u>. For the Conceptual Scenarios, limit your answer to 3 scenarios.







5. [35 marks] Navigation Design. For the home page design of the web site below, (a) match the types of navigation listed to the numbered callouts and (b) describe each of the types navigation:



Page 7 of 8

6. [50 marks] Putting it all together.

This course has used Jesse James Garrett's Elements of the User Experience as the foundational structure for the material that has been presented.

- a) Draw the 5 planes of the User Experience
- b) Draw in the activities and deliverables listed below into the correct planes
 - 1. User Research
 - 2. Personas
 - 3. Conceptual Model
 - 4. UI Design

 - 5. Visual Design6. Affinity Diagrams
 - 7. User Story Map
 - 8. Task Analysis (Consolidated Sequence Models)
 - 9. Information Design
 - 10. Business Objectives
- c) Use arrows and descriptive text to show the relationships between the activities and deliverables both within and between levels where appropriate.

End of Examination