ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
Department of Computer Science and Engineering (CSE)

MID SEMESTER EXAMINATION	**SUMMER SEMESTER, 2020-2021**
DURATION: 1 HOUR 30 MINUTES	**FULL MARKS: 75**

SWE 4833: UX/UI Interface Design

Programmable calculators are not allowed. Do not write anything on the question paper.
Answer **all 3 (three)** questions. Marks of each question and corresponding CO and PO are written in the right margin with brackets.

1. a) Imagine your company is building a new app for scheduling dog walkers. The purpose of the app is to match qualified dog walkers with customers who need help caring for their dogs, similar to a ride-sharing or home-sharing app. You have an interview transcript with Makayla, a fourth-grade teacher with two dogs.

    (10, CO2, PO2)

    Interview Transcript:
    I work as a teacher, and I coach volleyball after school, so my puppers Reggie and Snowball are often left home alone for long periods of time. My partner works on-call in a hospital, which often means 12-hour day or night shifts. When our schedules overlap, we definitely need help walking Reggie and Snowball. Sometimes, I pay my next-door neighbor's 17-year-old son to walk them. But my partner and I like to take a lot of trips, and we can't always take our pets with us. There are also a lot of places I can't bring Reggie, who is a much bigger dog than Snowball. He's not hypoallergenic like Snowball is. I'd love to find a dog walker that I could prescreen and learn more about. And I'd love a way to book someone consistently. Maybe someone who can do weekends regularly and can commit to specific times while I'm working. Ideally, I could schedule dog sitting days in advance. I just need a consistent dog walker that I can screen to make sure they're safe and good with animals! I'm willing to pay a little more to get something like this instead of constantly requesting help from my neighbor.

    Create an empathy map for Makayla to identify the user needs for the app.

    b) What are personas? Suggest the different demographics of the personas required for the different types of users of the above app.

    (5, CO1, PO2)

    c) Create a persona for Makayla based on the interview transcript. An image is not required for creation of this persona.

    (7, CO2, PO2)

    d) Suggest some ways in which the designers can avoid designer bias when designing the app for scheduling dog walkers.

    (3, CO2, PO2)

2. a) In the design of google maps, the original system used one color for each detail- from forest bogs to shrubs- resulting in differences so subtle that it was difficult to distinguish important elements like roads, text, and borders. The colors were also very highly saturated and matched the satellite images taken of the earth from outer space.

   Eventually the designers reduced the palette down to a smaller number of colors with much lower saturation, while retaining all of the rich details of the Map.

   How may this change have improved the user experience?

   6
   (CO2)
   (PO2)

   b) What do you understand by
      i) Accessibility
      ii) Empathetic Design
      iii) Crazy Eights
      iv) Situational Disability
      v) Closure

   10
   (CO1)
   (PO1)

   c) Create a report for a competitive audit of any **one** of the following products:
      i) Food Delivery Website
      ii) To Do List App
      iii) E-commerce Website
      iv) Learning Management System Website

   Outline the goals of the competitive audit for your chosen product and list at least three features that you think should be compared. The features of at least three existing competitors should be analysed in your audit.

   9
   (CO2)
   (PO2)

3. a) Ideate on the changes that need to be made when a video streaming website on a desktop is designed for a mobile device.

   6
   (CO2)
   (PO2)

   b) What are the phases in the design thinking framework? Explain them with an example.

   9
   (CO1)
   (PO1)

   c) How is universal design different from inclusive design?

   5
   (CO1)
   (PO1)

   d) Contrast between design research and post-launch research.

   Company B has a dashboard to track metrics like website views, blog post traffic and social post engagements. Explain with reasons which type of research is being facilitated through this dashboard.

   2 + 3
   (CO1)
   (PO2)