

**Graphical User Interface Summer 2019**  
**Take Home Quiz**  
**Due June 12, 2019 at 11:55 pm**

**Submission Instructions:**

1. Please submit your work directly in TRACS (using the TRACS editor) or as a text/MS-word/PDF attachment by the due date/time.
2. Please write your name in the quiz header and as a part of the file name of the attachment.
3. Please use only zip for compression.
4. Please do not submit your quiz via email. If you miss the deadline, then please submit it on TRACS and send me an email notification.
5. It must be your own work.

**Quiz Questions and Instructions:**

In many product development environments, the product development phase starts through marketing research. The marketing personnel and the stakeholders develop a document, referred to as the marketing requirement document (MRD), that specifies the requirements imposed on the product that has to be developed.

Generally, the engineers (engineering department) receive the MRD and produce a product requirement document (PRD) that reflects the requirements from a product that would satisfy the MRD as good as possible. One of the components of the PRD might be usability requirements. Later-on based on the usability requirements the engineers might produce a testing document that define the procedure and methodology of testing the product and verifying that it complies with the requirements.

Consider the attached document Vacation-Pro-MRD. The document is a skeleton of the marketing requirement document for a vacation / leisure travel management system. For the attached MRD:

- a. Define The superset of Usability Metric (e.g., learnability, satisfaction etc.)
- b. Define the usability requirements part of the relevant PRD (WRT the metrics defined above),
- c. Define procedures for testing the usability of your system,

Your usability requirements and testing procedure should refer to several aspects of classical usability definitions (as presented about the ISO related standards) and to several effort-based usability metrics (presented in class).

VacationPro  
Marketing Requirements Document  
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## Executive Summary

*Omitted*

## Objective

To supply travel agencies with a competitive vacation / leisure travel management system service with superb user interface. The Travel agency will purchase a complete turnkey solution from Vacation\*Star.

## Competitive Information

Company C0 is offering product P0 with the following features:

F0; F1 other features *Omitted*. Company C1 *Omitted*, Company C2 *Omitted*.

The following companies have web-based service for end-users and travel agents:

... CheapTickets.com, ORBITZ.com, travelocity.com, delta.com, aa.com, continental.com, and *Omitted* ...

## Product description

VacationPro is a complete system (hardware and software) for leisure and vacation travel management. It includes a computer system along with the software needed to assist travel agents to supply a complete solution for a vacation package to their customers.

The system contains, a desktop computer with a large disk drive, screen, connection to a distributed data base management system and software packages including "VacationPro", our software package. This document concentrates on VacationPro.

The travel agency purchases the system along with subscription to the data base management system. A copy of the database management system is located on the desktop. This copy is updated 30 times per hour.

The entire operations of searching for a vacation package and setting a vacation plan for the customer including all the reservations and orders is done locally on the VacationPro system. The customer specifies his exit location, desired vacation location(s), other preferences, number of attendants, and personal data to the travel agent. The agent searches the DBMS either with the customer or on his own, trying to find the package that best matches the customer request. She can propose several alternatives to the customer. When the customer approves a travel package, the agent, using VacationPro, is ordering airline tickets, event tickets, etc. In addition, he makes all the relevant reservations such as hotels, rental cars, and restaurants. The system can handle incomplete data, in which case it offers several alternatives to the user and asks for additional data as appropriate. **The system is a turnkey solution, easy to use, with a superb and unprecedented user interface.**

At the minimum, the system should have all the functionality and UI features included in the web sites mentioned above.

## **Marketing requirements**

*Other requirements Omitted*

## **GUI Requirements**

We have concluded that under current market conditions the User Interface is the most important single decision factor for a travel agency when purchasing an online travel management system.

The GUI should support all the functionality of the system. It should include the following features *Omitted*. It should comply with the following usability criteria *Omitted*.

At the minimum the system will surpass the features of the site with the best GUI from the sites mentioned above.

Additional information *Omitted*.

A prototype of the system should be ready by *TBD*.