UNIVERSITY OF INFORMATION TECHNOLOGY

Faculty of Information Systems

Introduction to the course

System Analysis and Design

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Introduction

1. Course name: System Analysis and Design
2. Number of credits: 4 (3 Lectures – 1 Lab)
3. Description
4. Content
5. Requirements and Expectations
6. Assessment
7. References

Description

- The course provides concepts and methodologies to analyze and design an information system, including basic concepts of information systems, methodology, requirement discovery, data analysis and design, process analysis and design, and user interface design

- The course provides analysis and design skills for building an information system, proficiently use some tools to create data models, process models.

- Practice teamwork skills

Contents

Requirements and Expectations

- Preparation

- Attendance (NOT absent over 3 class sessions)

- Teamwork

- Homework

- Project

  - Group: 4 students

  - Analyse and design an application using SDLC

Assessment

- Attendace, discussions in class, homework: 20%

- Computer-based testing (Project): 30%

- Final exam: 50%

- Bonus score: Max +5% to the Project

  - Excellent students (Discussion, other activities)

Project

- Group: 4 students/group.
- Students have to register at the course in the two first weeks.
- Students can choose favorite topics (not the same among groups) → Lecturer's approval required.
  - Topic
  - Analyse user requirements.
  - Analyse and design data component: Entity – Relational Diagram, Relational Data Model, and constrains
  - Analyse and design process component: Data Flow Diagram: focus on main business processes
  - Design User interface: input, output
  - Build an application with core functions

References

1. Gary B. Shelly, and Harry J. Rosenblatt, Systems analysis and design, 10th edition, United States of America, 2013.

2. Kenneth E. Kendall, and Julie E. Kendall, *System Analysis and Design,* Pearson Education, Inc. Publishing as Prentice Hall, 9th edition, 2014.

3. Joseph S. Valacich, Joey F. George, Jeffrey A. Hoffer, Essentials of Systems Analysis and Design, 6th edition, Pearson Publisher, 2014

4. Cao Thi Nhan, Nguyen Dinh Loan Phuong, System analysis and design, Vietnam National University, 2020.