# uCertify Course Outline

**Interaction Design** 



04 Jul 2024

- 1. Course Objective
- 2. Pre-Assessment
- 3. Exercises, Quizzes, Flashcards & Glossary

Number of Questions

- 4. Expert Instructor-Led Training
- 5. ADA Compliant & JAWS Compatible Platform
- 6. State of the Art Educator Tools
- 7. Award Winning Learning Platform (LMS)
- 8. Chapter & Lessons

**Syllabus** 

Chapter 1: WHAT IS INTERACTION DESIGN?

Chapter 2: THE PROCESS OF INTERACTION DESIGN

Chapter 3: CONCEPTUALIZING INTERACTION

Chapter 4: COGNITIVE ASPECTS

Chapter 5: SOCIAL INTERACTION

Chapter 6: EMOTIONAL INTERACTION

Chapter 7: INTERFACES

Chapter 8: DATA GATHERING

Chapter 9: DATA ANALYSIS, INTERPRETATION, AND PRESENTATION

Chapter 10: DATA AT SCALE AND ETHICAL CONCERNS

Chapter 11: DISCOVERING REQUIREMENTS

Chapter 12: DESIGN, PROTOTYPING, AND CONSTRUCTION

Chapter 13: INTERACTION DESIGN IN PRACTICE

Chapter 14: INTRODUCING EVALUATION

Chapter 15: EVALUATION STUDIES: FROM CONTROLLED TO NATURAL SETTINGS

Chapter 16: EVALUATION: INSPECTIONS, ANALYTICS, AND MODELS

Videos and How To

9. Practice Test

Here's what you get

Features

10. Performance Based labs

Lab Tasks

Here's what you get

11. Post-Assessment

# 1. Course Objective

The Interaction Design course helps you learn the essential principles and methods for designing intuitive digital products that seamlessly blend form and function. Explore user-centered design processes like storyboarding, persona development, and usability testing. Master interaction design patterns for web, mobile, and emerging technologies. Learn to create interactive prototypes and delightful micro-interactions. Study UI components, information architecture, and accessible design best practices. Through real-world case studies and hands-on projects, you'll apply interaction design concepts to solve complex UX challenges.

# 2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

# 3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.



# 4. (?) Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



## 5. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



## 6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



# 7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 8. ( ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 9. ( State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

#### • 2014

1. Best Postsecondary Learning Solution

#### 2015

- 1. Best Education Solution
- 2. Best Virtual Learning Solution
- 3. Best Student Assessment Solution
- 4. Best Postsecondary Learning Solution
- 5. Best Career and Workforce Readiness Solution
- 6. Best Instructional Solution in Other Curriculum Areas
- 7. Best Corporate Learning/Workforce Development Solution

#### • 2016

- 1. Best Virtual Learning Solution
- 2. Best Education Cloud-based Solution
- 3. Best College and Career Readiness Solution
- 4. Best Corporate / Workforce Learning Solution
- 5. Best Postsecondary Learning Content Solution
- 6. Best Postsecondary LMS or Learning Platform
- 7. Best Learning Relationship Management Solution

#### • 2017

- 1. Best Overall Education Solution
- 2. Best Student Assessment Solution
- 3. Best Corporate/Workforce Learning Solution
- 4. Best Higher Education LMS or Learning Platform

#### • 2018

1. Best Higher Education LMS or Learning Platform

- 2. Best Instructional Solution in Other Curriculum Areas
- 3. Best Learning Relationship Management Solution

#### 2019

- 1. Best Virtual Learning Solution
- 2. Best Content Authoring Development or Curation Solution
- 3. Best Higher Education Learning Management Solution (LMS)

#### • 2020

- 1. Best College and Career Readiness Solution
- 2. Best Cross-Curricular Solution
- 3. Best Virtual Learning Solution

# 11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

## **Syllabus**

#### Chapter 1: WHAT IS INTERACTION DESIGN?

- Introduction
- Good and Poor Design
- Switching to Digital

•	What to Design
•	What Is Interac
•	People-Centere

- ction Design?
- ed Design
- Understanding People
- Accessibility and Inclusiveness
- Usability and User Experience Goals
- Summary
- Further Reading

## Chapter 2: THE PROCESS OF INTERACTION DESIGN

- Introduction
- What Is Involved in Interaction Design?
- Some Practical Issues
- Summary
- Further Reading

## Chapter 3: CONCEPTUALIZING INTERACTION

• Introduction

• Interface Metaphors Interaction Types • Paradigms, Visions, Challenges, Theories, Models, and Frameworks • Summary • Further Reading Chapter 4: COGNITIVE ASPECTS • Introduction • What Is Cognition? • Cognitive Frameworks • Summary • Further Reading Chapter 5: SOCIAL INTERACTION • Introduction • Being Social • Face-to-Face Conversations

• Conceptualizing Interaction

• Conceptual Models

- Remote Collaboration and Communication
  Co-Presence
  Social Games
  - Summary
  - Further Reading

#### Chapter 6: EMOTIONAL INTERACTION

- Introduction
- Emotions and Behavior
- Expressive Interfaces: Aesthetic or Annoying?
- Affective Computing and Emotional AI
- Persuasive Technologies and Behavioral Change
- Anthropomorphism
- Summary
- Further Reading

## Chapter 7: INTERFACES

• Introduction

• Interface Types
Natural User Interfaces and Beyond
• Which Interface?
• Summary
• Further Reading
Chapter 8: DATA GATHERING
• Introduction
• Six Key Issues
• Capturing Data
• Interviews
• Questionnaires
• Observation
• Putting the Techniques to Work
• Summary
• Further Reading
Chapter 9: DATA ANALYSIS, INTERPRETATION, AND PRESENTATION

• Introduction

- Quantitative and Qualitative
- Basic Quantitative Analysis
- Basic Qualitative Analysis
- Analytical Frameworks
- Tools to Support Data Analysis
- Interpreting and Presenting the Findings
- Summary
- Further Reading

#### Chapter 10: DATA AT SCALE AND ETHICAL CONCERNS

- Introduction
- Approaches for Collecting and Analyzing Data
- Visualizing and Exploring Data
- Ethical Design Concerns
- Summary
- Further Reading

## Chapter 11: DISCOVERING REQUIREMENTS

• Introduction
• What, How, and Why?
• What Are Requirements?
Data Gathering for Requirements
Bringing Requirements to Life: Personas and Scenarios
• Capturing Interaction with Use Cases
• Summary
• Further Reading
Chapter 12: DESIGN, PROTOTYPING, AND CONSTRUCTION
• Introduction
• Prototyping
Conceptual Design
• Concrete Design
• Generating Prototypes
• Construction
• Summary
• Further Reading

#### Chapter 13: INTERACTION DESIGN IN PRACTICE

- Introduction
- AgileUX
- Design Patterns
- Open Source Resources
- Tools for Interaction Design
- Summary
- Further Reading

#### Chapter 14: INTRODUCING EVALUATION

- Introduction
- The Why, What, Where, and When of Evaluation
- Types of Evaluation
- Evaluation Case Studies
- What Did We Learn from the Case Studies?
- Other Issues to Consider When Doing Evaluation
- Summary
- Further Reading

# Chapter 15: EVALUATION STUDIES: FROM CONTROLLED TO NATURAL SETTINGS

- Introduction
- Usability Testing
- Conducting Experiments
- In-the-Wild Studies
- Summary
- Further Reading

#### Chapter 16: EVALUATION: INSPECTIONS, ANALYTICS, AND MODELS

- Introduction
- Inspections: Heuristic Evaluation and Walk-Throughs
- Analytics and A/B Testing
- Predictive Models
- Summary
- Further Reading



## Here's what you get

67

QUESTIONS

1

**FULL LENGTH TESTS** 

67

POST-ASSESSMENTS QUESTIONS

#### **Features**

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

#### **Unlimited Practice**

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

## 13. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

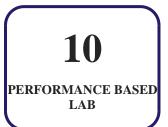
- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task

- Highly interactive learn by doing
- Explanations and remediation available
- Videos on how to perform

## **Lab Tasks**

- Exploring Multimodal Feedback in Human-Computer Interaction
- Design Sprint for Product Innovation
- Chatbot Design and Evaluation
- Interaction through Social Games
- Interacting with Emotional AI
- Analyzing about Voice Interfaces
- Interview Analysis Using Natural Language Processing (NLP)
- Sentiment Analysis for Crowd Emotion Inference
- Usability Testing for Voice-Activated Virtual Assistant
- Heuristic Evaluation for Website Usability

## Here's what you get



# 14. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

## **GET IN TOUCH:**

3187 Independence Drive Livermore, CA 94551, **United States** 

