# UDACITY FOR ENTERPRISE

THE SCHOOL OF BUSINESS

# UX Designer

COURSE SYLLABUS

# Overview

This Nanodegree program teaches the foundational skills all UX Designers use, whether they design mobile apps, desktop apps, or web platforms, and is ideal for learners who want to understand how to create development-ready designs, and build a UX portfolio to start and succeed in a UX Designer role.

A graduate of this program will be able to:

- Understand the fundamentals of UX Design, including Neilsen's Heuristic Evaluation, quantitative and qualitative research methodologies, and the design psychology behind designing for humans.
- Synthesize user research, frame design opportunities, run design sprints from ideation to prototype using Miro Board, and conduct usability tests to improve designs based on feedback.
- Convert designs into a wireframe and low fidelity sketch using Figma, and then into a high-fidelity interactive design that can then be prepared for engineering handoff.
- Incorporate visual design basics: information hierarchy, UI design patterns, visual hierarchy, as well as grid systems, typography, style guides, and basic design systems into your designs.
- Measure design performance through qualitative analytics to improve a design based on data.

This program is comprised of 3 courses and 3 projects, as well as a Capstone project. Each project presents an opportunity to grow your UX portfolio, and demonstrate your acquired skills.

## **Program Information**

LEVEL

Foundational



**TIME** 3 months Study 10 hours/week

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**PREREQUISITES** No required prerequisites



HARDWARE/SOFTWARE REQUIRED Access to the internet and a

64-bit computer.



LEARN MORE ABOUT THIS NANODEGREE

Contact us at enterpriseNDs@udacity.com.

# Our Classroom Experience





#### **REAL-WORLD PROJECTS**

Learners build new skills through industry-relevant projects and receive personalized feedback from our network of 900+ project reviewers. Our simple user interface makes it easy to submit projects as often as needed and receive unlimited feedback.

#### KNOWLEDGE

Answers to most questions can be found with Knowledge, our proprietary wiki. Learners can search questions asked by others and discover in real-time how to solve challenges.

#### LEARNER HUB

Learners leverage the power of community through a simple, yet powerful chat interface built within the classroom. Learner Hub connects learners with their technical mentor and fellow learners.

#### WORKSPACES

Learners can check the output and quality of their code by testing it on interactive workspaces that are integrated into the classroom.

#### QUIZZES

Understanding concepts learned during lessons is made simple with auto-graded quizzes. Learners can easily go back and brush up on concepts at anytime during the course.





#### **CUSTOM STUDY PLANS**

Mentors create a custom study plan tailored to learners' needs. This plan keeps track of progress toward learner goals.

#### **PROGRESS TRACKER**

Personalized milestone reminders help learners stay on track and focused as they work to complete their Nanodegree program.

## Learn with the Best



#### Shuang Liu

#### UX DESIGNER, GOOGLE

Shuang has enjoyed working in UX design across a variety of domains at Google, from YouTube, to technical cloud platforms. She is particularly interested in bringing a human touch to products. She received her Master's in Human Computer Interaction from The University of Michigan.



## Gabriel Ruttner

#### CO-FOUNDER & CTO, FEATHER DOCS

Gabe leads product, UX, and engineering for machine learning products at early-stage startups. His last company built UX research tools for designers at Fortune 500 companies. He holds degrees from Cornell University and Stony Brook University.



## Michael Dedrick

#### UX DESIGNER, GOOGLE

Michael is a UX Designer for Google after leading design at a Blockchain startup and working at a partnership with Apple and IBM. He is committed to connecting with clients and users—and bringing their vision to life. He has a design background from Sheridan, Toronto Film School, and OCAD University.



#### Melissa Hui

#### FOUNDER, CONTEXT LEAP

Melissa is the founder of Context Leap, an SF-based organizational and leadership transformation agency. With over a decade as a design and innovation strategist in the technology industry, she is dedicated to evolving the role of design in creating scalable and thoughtful human-centered experiences.



# Course 1: UX Fundamentals & Design Research

Product design starts with understanding the needs of users, which is gathered through comprehensive research. Learn the core principles of human-centered design and how to appropriately scope a design problem. Understand how to empathize with users when performing user research, including how to conduct in-depth interviews and create quantitative surveys, and use research data to uncover opportunities. You'll then apply psychology to design sketches, keeping the end-user in mind.

## Project

Formulate a Research Report

The first step to designing a great product is empathizing with users and uncovering their needs. In this project, you will develop a discussion guide, recruit research participants, and synthesize findings in the form of a research report. You'll validate your insights from interviews using surveys to get a comprehensive view of the topic you are researching. The goal of this project is to ask the right questions when interviewing users to understand their experiences in order to identify design opportunities, and create initial sketches that incorporate design psychology principles.

LESSON TITLE	LEARNING OUTCOMES
INTRODUCTION TO UX	<ul> <li>Apply usability principles to heuristic evaluation of product designs.</li> <li>Use design principles to identify user-friendly vs. manipulative design solutions.</li> <li>Learn how to scope a research topic to select a design problem.</li> </ul>
UX RESEARCH	<ul> <li>Learn how to design and execute a UX research plan, including research goals, recruiting criteria, and scripts.</li> <li>See how to build empathy with users and construct questions needed to run a semi-structured user interview and survey study.</li> <li>Understand how to analyze quantitative data collected from the user interview using the affinity diagramming method.</li> </ul>
DESIGN FOR HUMANS	<ul> <li>Learn how to appeal to human emotional and behavioral needs through design.</li> <li>Use design psychology principles to critique and iterate design sketches.</li> </ul>



# Course 2: Concept to Low-Fidelity Prototyping

The best products have gone through rounds of iteration based on user research and feedback. Learn the process of a design sprint, and how to translate findings from research into a prototype that can be tested with users. Understand how to foster team collaboration and use divergent and convergent thinking to rapidly create testable prototypes. Apply user interface principles in the design of a clickable prototype, and conduct a usability test to gain valuable feedback from users that can be used in design iterations.

## Project

Develop a Validated Low-Fidelity Prototype

Insights from research are inputs to the design sprint process of creating a validated design solution. In this project, you will take a product idea through the design sprint process to come up with a user-tested low-fidelity prototype of your solution. First, you'll set up the infrastructure to start the design sprint and synthesize research findings. Then, you'll go through ideation exercises to create paper sketches, and digital prototypes based off the paper sketches. Lastly, you'll conduct a usability test of your prototype with users to validate design assumptions, and create a second iteration of the prototype based on user feedback.



# Course 2: Concept to Low-Fidelity Prototyping, cont.

LESSON TITLE	LEARNING OUTCOMES
DEFINE THE DESIGN SPRINT	<ul> <li>Learn how to apply the Double Diamond design process to create product concepts.</li> <li>Apply guerilla design sprints to collaboratively design with users.</li> <li>Understand how to facilitate collaborative work sessions to build a collective understanding of the user, source ideas, and obtain "buy-in" from various stakeholders.</li> </ul>
SYNTHESIS: RESEARCH TO FEATURES	<ul> <li>Discover themes and opportunity areas from research.</li> <li>Learn how to define problems as opportunities.</li> <li>Understand collaborative ideation techniques and how to apply them to focus on the best ideas given the design scope.</li> <li>Learn how to prioritize ideas as design features based on a value-complexity matrix to create a minimum viable product.</li> </ul>
UI PRINCIPLES	<ul> <li>Understand various user interface layouts at different levels of fidelity.</li> <li>Learn how to organize visuals and touchpoints so designs are user-friendly.</li> <li>Understand how to ensure designs are accessible to all populations with different user needs.</li> </ul>
CLICKABLE PROTOTYPING	<ul> <li>Learn how to incorporate UI kits and components into a prototype.</li> <li>Understand the capabilities of prototyping tools for product design.</li> <li>Define users flow and user interactions to create a clickable prototype.</li> </ul>
USABILITY TESTING	<ul> <li>Understand how to design a digital journey map.</li> <li>Learn how to conduct in-person and remote usability tests to gather specific types of feedback on prototypes.</li> <li>Understand how to iterate on prototypes based on user feedback.</li> </ul>

# Nanodegree Program Overview



# Course 3: High-Fidelity Prototyping to Post-Launch Analysis

Once products have been tested for its effectiveness, they need to be enhanced for engagement. Learn advanced user interface principles to build interactive designs that are ready to be handed off to engineering for feedback. Understand how to solicit and integrate feedback from engineering to enhance the design before it is ready for development. Assess the engagement of the product through remote usability testing and other experimentation methods. Finally, you'll learn how to improve design and user experiences based on engagement data in order to increase key performance indicators.

## Project

Create and Improve a High-Fidelity Design

A low-fidelity prototype allows you to validate that the core functionality of your solution addresses user needs, and the next step is to ensure the interface and experience of your solution engages and delights users as much as possible. In this project, you'll enhance a low-fidelity prototype through the application of a data-enhanced high-fidelity design by submitting a midterm and a final project. For the midterm project, you'll source visual design inspiration to develop a style guide and component library. Then, you'll use the style guide and component library to create a high-fidelity mockup of your low-fidelity prototype. For the final project, you'll improve the accessibility of your design and iterate the design based on engagement data and key performance indicators.



# Course 3: High-Fidelity Prototyping to Post-Launch Analysis, cont.

LESSON TITLE	LEARNING OUTCOMES
UI DESIGN BASICS	<ul> <li>Learn how to recognize UI trends and apply various interaction and typography styles.</li> <li>Learn the value and process of annotating designs.</li> <li>Understand the components of a design system.</li> </ul>
BUILDING INTERACTIVE DESIGNS	<ul> <li>Learn how to find and use UI kits and plugins in a high-fidelity design.</li> <li>Learn how to source inspiration to generate the visual elements of a style guide.</li> <li>Apply design principles to generate high-fidelity mockups.</li> </ul>
PREPARING DESIGN FOR ENGINEERING HANDOFF	<ul> <li>Understand the various levels of accessibility and how to incorporate them into a design.</li> <li>Understand how to build user stories and tasks flows that facilitate feedback from engineering.</li> <li>Learn how to adjust designs and export assets so they are production-ready for handoff to engineering.</li> </ul>
IMPROVING DESIGN PERFORMANCE	<ul> <li>Understand the key performance indicators that drive an engaging design.</li> <li>Learn how to use remote testing tools and techniques to collect and make sense of data.</li> <li>Learn how to optimize designs using engagement data.</li> </ul>

# Nanodegree Program Overview



# Course 4: UX Portfolio Design

UX Designers demonstrate their skills by showcasing their designs and processes in a portfolio. Understand what should and shouldn't be included in a portfolio, as well as the key components that appeal to target audiences. Learn how to organize previous work and communicate it online, keeping the audience and your career objectives in mind. Apply storytelling and branding frameworks to create a personal profile that conveys a unique value proposition. You'll also learn best practices for maintaining and updating a UX portfolio.

## Project

> Build a UX Portfolio Case Study

A UX portfolio is the tool that UX Designers use to display their abilities and experience to the world. In this project, you will apply portfolio design and personal branding best practices to create a starter portfolio that consists of projects completed in this Nanodegree program. First, you'll reflect and document the process you went through to complete your projects. Then, you'll organize assets and notes in a way that visualizes the steps you took to complete these projects. Lastly, you'll develop an accompanying "About Me" page that conveys what makes you unique as a UX professional.

LESSON TITLE	LEARNING OUTCOMES
INTRODUCTION TO PORTFOLIO DESIGN	<ul> <li>Understand the purpose of a portfolio for storytelling.</li> <li>Learn the key components of a UX portfolio and how to avoid pitfalls when creating one.</li> <li>Understand ways to get inspired and prepared before building a UX portfolio.</li> </ul>
BUILDING A STARTER PORTFOLIO	<ul> <li>Learn how to select and create a prototype of a project case study.</li> <li>Learn how to finalize and prepare content of a project case study to be displayed online.</li> <li>Understand how to design for the portfolio experience and update a UX portfolio based on industry best practices.</li> </ul>

## Our Nanodegree Programs Include:



#### **Pre-Assessments**

Our in-depth workforce assessments identify your team's current level of knowledge in key areas. Results are used to generate custom learning paths designed to equip your workforce with the most applicable skill sets.



## Dashboard & Progress Reports

Our interactive dashboard (enterprise management console) allows administrators to manage employee onboarding, track course progress, perform bulk enrollments and more.



#### Industry Validation & Reviews

Learners' progress and subject knowledge is tested and validated by industry experts and leaders from our advisory board. These in-depth reviews ensure your teams have achieved competency.



## Real World Hands-on Projects

Through a series of rigorous, real-world projects, your employees learn and apply new techniques, analyze results, and produce actionable insights. Project portfolios demonstrate learners' growing proficiency and subject mastery.

# **Our Review Process**

## Real-life Reviewers for Real-life Projects

Real-world projects are at the core of our Nanodegree programs because hands-on learning is the best way to master a new skill. Receiving relevant feedback from an industry expert is a critical part of that learning process, and infinitely more useful than that from peers or automated grading systems. Udacity has a network of over 900 experienced project reviewers who provide personalized and timely feedback to help all learners succeed.



Vaibhav

"I never felt overwhelmed while pursuing the Nanodegree program due to the valuable support of the reviewers, and now I am more confident in converting my ideas to reality."

## All learners benefit from:

– now at – CODING VISIONS INFOTECH





Unlimited submissions and feedback loops

## How it Works

for coding projects

Real-world projects are classroom experience, making for a seamless review process flow.

#### • Go through the lessons and work on the projects that follow

- · Get help from your technical mentor, if needed
- Submit your project work
- Receive personalized feedback from the reviewer
- If the submission is not satisfactory, resubmit your project
- Continue submitting and receiving feedback from the reviewer until you successfully complete your project

## About our Project Reviewers

Our expert project reviewers are evaluated against the highest standards and graded based on learners' progress. Here's how they measure up to ensure your success.



# UDACITY FOR ENTERPRISE

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