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Digital Design

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Objectives

Bachelor and Master's degree course is a continuation of PV083 Graphic Design II and PV067 Typography II. The aim of this course is to create interactive content for digital devices using visual communication, animation, illustration, and information graphics. In the process, students will obtain knowledge of various publication and digital prototyping platforms and software. Students are expected to a pro-active approach to solving new technological procedures and familiarize themselves with different user-centered design methods.

Learning Outcomes

A student will understand the subject of the graphic design and typography, will be able to design and implement a motion graphics and will be able to relate the motion graphics with static elements and dynamic picture through for interactive media.;

Teaching Methods

Work in a studio: Assignment, consultation, working on the assignment (using graphics software such as the Adobe Suite along with prototyping software like Origami Studio, Adobe XD, or Proto.io). Students consult with teachers and take their remarks into account. At the end, they submit a final digital presentation.

Assignments

Assignment 1: Latin American Art Exhibition at Lužánky Park

Duration: 6 weeks

Description: The consulates of several Latin American countries are preparing an outdoor exhibition of Latin American artists at Lužánky Park next Spring. This exhibition will include paintings, sculptures, music, and film from Argentina, Brazil, Colombia, and Mexico. For the exhibition, the organizers will set up digital kiosks (touch-enabled displays) throughout the park that will allow visitors to learn about the artists, the artworks, experience the music and videos, as well as find information about the location of park's facilities such as bathrooms, public phones, ATMs, and public transportation.

Your task in this project is to design the interface and the content of the kiosks for the exhibition. It is up to you to conduct research and decide the exhibition's theme, what kind of content people can access, the artists and artwork featured, and collect all visual material. Prototyping for this assignment will be done exclusively using Adobe InDesign, while creating any multimedia content can rely on other software. Kiosks will be designed using 1080p resolution in 55" displays in vertical format.

To submit:

• Original InDesign files

• Video walkthrough of the features.

Assignment 2: Autonomous Driving Car Dashboard

Duration: 7 weeks

Description: Škoda Auto, part of the German automaker Volkswagen Group, is developing a Level-4 autonomous electric family concept car using the group's ID platform, which relies on the Argo AI technology. As a Level-4 car, it allows fully automated driving in cities across the world. As a design team, the challenge in this assignment is to design the car's dashboard and front console.

Consider that as such, the design of the dashboard must include not only include traditional information like speed or gas consumption, but also navigation information, travel guides, maps, and any other features you consider will be necessary for a car like this. In this assignment, you will not design for a traditionally square display but a curved, even flexible display that adapts to different use moments. The shape of the display is up to you (and what you considers is the best way to provide the passengers with the right information). For more details about these cars, check https://www.volkswagen.co.uk/electric/software-and-technology/autonomous-driving

To submit:

• User journey map

• Digital mockups of the dashboard with at least 6 features.

• Images or videos and feedback about user testing.

MUST READ:

Jacob, R. J., Girouard, A., Hirshfield, L. M., Horn, M. S., Shaer, O., Solovey, E. T., & Zigelbaum, J. (2008). Reality-based Interaction: A Framework for Post-WIMP Interfaces. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems,* 201–210. Florence, Italy: ACM. Retrieved from http://dl.acm.org/citation.cfm?id=1357089

Valli, A. (2008). The Design of Natural Interaction. Multimedia Tools and Applications, 38(3), 295–305. doi: 10.1007/s11042-007-0190-z

MUST READ:

We will rely on some of chapters from the Universal Methods of Design book:

Martin, B., & Hanington, B. M. (2012). *Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions* (Digital ed). Beverly, MA, US: Rockport Publishers.

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Assignment	Wk	Activities	Design topics	Homework
Assignment 1: Interactive Kiosk	1	**1. Introduction:** Course structure, objectives, and rules. **2.** Description of the semester's assignments. **3.** Assignment 1 Briefing **4. In class work:** Research and inspiration	(none)	**1. Required**: Read Valli (2008) and Jacob et al (2008) papers on tangible interaction **2.** Research: Start planning and collecting the content **3.** Define the theme of the exhibition.
	2	**1. In class work:** Information structure	**Reference Lecture:** Tangible Interaction	**1. Navigation map**
	3	**1. Group consultation:** Research and work plan **2. In class work:** Initial Mockups – Interface design	**Tech Lecture:** Basics of InDesign (Master pages, layers, and interactivity)	**1.** Continue compiling content **2.** Create InDesign Master Pages **3.** Watch (if necessary): Create dynamic e-books and e-magazines (external link) Add interactivity (external link)
	4	**1. In class work:** Apply content and develop mockups **2. Consultation**	**Reference Lecture /Case study:** Digital kiosks)	1. Apply design
	5	**1. Group exercise:** testing	(none)	1. Iterate design based on testing
	6	**1. In class work:** Finish content and mockups	(none)	1. Submission at the end of week 6.
Assignment 2: Autonomous Driving Car Dashboard	7	**1.** Assignment 2 Briefing **2. In class work:** Research, inspiration, and pain points/opportunities	**Reference Lecture**: Design Frameworks	1. Pain points/Opportunities using POEMS or 5 E framework **2. Required reading:** Chapter 95 "User Journey Maps" of Universal Methods of Design (Martin & Hannington, 2012)
	8	**Consultation:** Pain points and initial ideas. **2. In class work:** Journey map	(none)	**1.** User Journey map **2.** Initial Wireframes
	9	**1. 5-minute presentation group critique:** Initial idea and journey maps. **2. In class work:** Iteration of wireframes	**Reference lecture:** Urge Theory	**1.** Prepare Paper Mockups **2. Required reading:** Chapter 73 "Scenarios" and Chapter 94 "Usability Testing" of Universal Methods of Design (Martin & Hannington, 2012)
	10	**1. Consultation:** Paper mockups **2. In class work:** Iteration of wireframes, and plan user tests	(none)	**1.** First user tests on paper: 3 tasks/scenarios, 3 participants minimum.
	11	**1. Group discussion:** Test findings **2. Consultation/In class work:** Iteration plan and initial digital mockups	(none)	**1.** Digital mockups
	12	**1. Consultation/In class work:** Digital mockups	(none)	**1.** Second round of user tests: 3 tasks/scenarios, 3 participants minimum.
	13	**2. Consultation/In class work:** Iterate mockups, finalize digital prototype	(none)	Submission deadline: First week after Winter break