

Programming in Graphical Environment

Introduction

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Class Types

- Lectures — 15 classes
- Laboratories:
 - Tutorial Laboratories — 3 classes
 - Graded Laboratories — 9 classes
 - Retake Laboratory

Full rules, overview and schedule on course website:

<http://pages.muni.pw.edu.pl/~aszklarp/pige.php>

Assessment Rules I

- All labs scored for 12 points
- Exception: lab 6 scored for 4 points.
- 12 p. labs split into parts:
 - Part A - labs 1-4
 - Part B - labs 5, 7-9
- Each lab contains "in class" part — 90 minutes to solve
- Some contain "at home" part to be submitted during the following class (finishing "in class" part is a requirement)
- All solutions must be submitted to the teacher, otherwise 0 points
- Anti-plagiarism software used to compare them, 0 points if significant similarities are found
- Repeating offenders will fail the subject
- Retake result replaces selected score from labs 1-4, 5, 7-9.

Assessment Rules II

- One absence can be made up during retake
- Excused absences might be handles as follows (at teachers discretion):
 - For tasks with "at home" part, allow student to submit full solution via e-mail on due date
 - For extended absences, establish individual assessment rules.
- 24 point from each of Part A and B and 51 points in total to pass the subject
- Final Grade:
 - 0-50 pts.: 2.0 (D - Fail)
 - 51-60 pts.: 3.0 (C - Satisfactory)
 - 61-70 pts.: 3.5 (C+ - Fairly Good)
 - 71-80 pts.: 4.0 (B - Good)
 - 81-90 pts.: 4.5 (B+ - Above Good)
 - 91-100 pts.: 5.0 (A - Very Good)

Course Overview I

- GUI design guidelines
- Windows API
 - Windows, Messages, Data Structures, Error Handling
 - Input (Mouse, Keyboard, etc.)
 - 2D Graphics with GDI
 - Resources, controls, dialog boxes
- Window Forms
 - Application structure and settings
 - Forms, Properties, Events
 - Built-in and Custom Controls
 - Resources and Localization

Course Overview II

- WPF
 - XAML Language, Application, Windows, Pages
 - Dependency Properties, Routed Events, Logical and Visual Trees
 - Layout, Panels, Content and Items Controls, Commands
 - Styles, Templates, Data Binding
 - Resources, MVVM pattern
- HTML&CSS
- Unicode, Internationalization (Globalization, Localization), Accessibility

Separate reading recommendations will be provided for each general topic

GUI Design — Recommended Reading I



Windows Dev Center

Design basics for Desktop applications

<https://docs.microsoft.com/en-us/windows/win32/uxguide/designprinciples>



Windows Dev Center

Design and code Windows apps

<https://docs.microsoft.com/en-us/windows/uwp/design/>






Goole Material Design

Material Design Guidelines

<https://material.io/design/>

GUI Design — Recommended Reading II

-  Wilbert O. Galitz
The Essential Guide to User Interface Design
An Introduction to GUI Design Principles and Techniques
Wiley, 2007
-  Everett N. McKay
Developing User Interfaces for Microsoft Windows
Microsoft Press, 1999
-  Larry E. Wood
User Interface Design
Bridging the Gap from User Requirements to Design
CRC Press, 1997

End of Introduction

Thank you for listening! 😊