



cphbusiness

COPENHAGEN BUSINESS ACADEMY



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The Design Diaries

1. Introduction to module 3

Welcome to module 3 - the technical core module of the semester! This module is focussing on the technical and design aspects of dynamic web pages, you are going to be introduced to server side (backend) programming with PHP, basic principles of MySQL databases, dynamic rendering of database records in the HTML frontend and accessing databases using standard (PHPmyAdmin) and custom (PHP/HTML) client interfaces. You will also learn about planning and documenting dynamic web projects using use cases, user stories and database attribute tables.

The module is concluded by a small-scale project: The Design Diaries - a blog project, where you will take care of everything: design, content and technology!

Your navigators through the module are:

- Jesper Hinchely (jhi@cphbusiness.dk)
- Marc Kluge (klu@cphbusiness.dk)

2. Learning objectives

2.1. Interaction Development

After this module you will have gained basic skills in programming server-based multimedia applications with PHP, you will be able to apply a data manipulation language for databases (mySQL), you are introduced to key methods in data modelling and implementation of databases and learned about central methods and tools to model, structure, and implement functionality

2.2 Design and Visualisation

You will sharpen your skills in designing user interfaces based on user-centered design principles and assess and apply central principles for digital graphic design.

Note: The learning objectives of this module are extremely important for your 1st year exam concluding the semester!

3. The Design Diaries project

The objective of the project is to work with dynamic web pages and basic content management: You are going to develop a small scale blog for a design related topic. You're will develop:

- all content and front-end design
- an interface for publishing articles
- a database.

The project is conducted in groups of 2-3 students.

3.1 The content

Your blog has to focus on 1 specific design-related topic of the Multimedia Design curriculum, for example on theoretic subjects like typography, layout, colour theory, design styles, design history, design

principles, logo design or on technical aspects like bitmap editing or vector graphic. You have to publish at least 3 articles on your chosen topic. An article or post must at a minimum contain:

- a headline
- the body text
- an image
- information about the author (name or nickname)

Publishing language is English or Danish.

3.2 Frontend design

The frontend of your blog is a single page displaying the published articles in well-defined sections. Your visual design should of course reflect your chosen subject and is supposed to be fully responsive. The page has to contain:

- a header/title section
- an easy accessible link to the blog's interface
- all articles
- a footer section with the names of all group members and links to your student portfolios
- valid HTML 5

3.3 Interface design

Together with the single page blog you are going to develop an interface for publishing articles, uploading pictures and storing information in the database. Besides easy access to the interface, appealing design and usability we expect:

- responsive design
- appropriate user feedback
- solid form input check with JavaScript/jQuery
- valid HTML 5
- documented user interaction with a use case or a user story

3.4. Database design

Your blog is going to be a mix of static HTML and dynamic content. The header/title section and the footer can be static HTML, but the content of your articles need to be retrieved from a database.

The database must at least contain:

- 1 table able to store the content of an article (headline, body text, image URL, author information)
- appropriate data types

In addition you need to document your database design with an

- attribute table

The blog including the database must be online at hand-in deadline!

4. Group hand-in on Fronter.

You need to upload a synopsis (format: PDF) containing

- Names of the group members + CPHbusiness email addresses + link to student portfolios
- Link to your blog (clickable + clearly visible)
- Use case or user story
- Database attribute table
- PHP code (readable - NO screenshots) with appropriate comments

Note: Please name your synopsis group_{your group number}.pdf - example: group_4.pdf!

5. Project calendar

Project start/introduction	14./15.03
Deadline for group registration	17.03, 12:00 noon

mail to jhi@cphbusiness.dk

Easter holidays	21.03-28.03
Project counselling day (all classes) @ Marc	08.04, 08:30-12.00
Deadline for project hand-in	10.04, 18:00 on Fronter
Post project counselling (separate classes)	12./13.04 (see below)

6. Study points

The module comprises 20 study points in total upon completion. The study points are assigned according to the following matrix:

1. Correct upload to Fronter + update of student portfolio	5 study points
2. Appropriate frontend design (blog, interface) + 3 design related articles	5 study points
3. Retrieving and displaying content from a database	5 study points
4. Writing to a database	5 study points

7. Evaluation

You will receive brief feedback through your blog - posted as articles ;-). If you should not be able to complete the interface part of the project, you'll find a list over the assigned study points on Fronter (15.04 at the latest).

8. Counselling, project and post project

There is 1 common project counselling day (Marc) for all classes on Friday, 08.04 for all classes. Post project counselling (Marc & Jesper) is offered 12./13.04 for all groups with technical problems, including the possibility for re-ups in order to achieve max study point score:

MUL A 12.04, 12:30-16:00, 3.05

MUL B 12.04, 08:30-12:00, 3.05

MIL 13.04, 08:30-12:00, 3.66

Note: You can also use the post project days for getting more detailed feedback about the design part from Jesper.

9. Tips for the workflow

Your project consists of 2 PHP files:

1. The blog template containing HTML/CSS/JavaScript and PHP/mySQL code retrieving content from the database
 2. The interface containing a HTML form, JavaScript (form check!) and PHP/mySQL code writing into your database
- There are a lot of things you (hopefully ;-)) do know about - and there are a lot of things you do not have a clue of (yet). But: Don't wait - find a partner, take an agile approach and start developing today:

- Decide on the blog's design topic
- Write the first two articles (in a plain text editor, better for copy & paste action later on)
- Decide on a proper project structure (files and folders)
- Develop your responsive blog template in HTML/CSS/JavaScript. A tip up front: You can use the file extension *.php (instead of *.html) right away - if your file does not contain PHP code at all it will still render correctly in the browser without other precautions
- Include a self-contained section for an article, where the content (text, image) will later on be replaced by dynamic PHP routines.
- Start developing the responsive interface in HTML/CSS/JavaScript - lay the basis for proper form check

As the lessons proceed you can implement more and more dynamic features and replace parts of the static content using PHP and mySQL:

- The database is taking form
- The content of your articles are retrieved from the database
- The interface form's input fields correspond to your database, you finally are able to write into the database

Godspeed! And may the code be with you!

Jesper & Marc
Student Boogey Men

