

DMIT2008 Design Patterns Report

Introduction

For this assessment, you and a partner will need to prepare web report (a single web page) on programming (and specifically JavaScript) design patterns. Your report should be well thought-out and informative.

Tasks

You and your partner are tasked with creating a short report on the use of design patterns in web development (with an implicit slant towards JavaScript specifically). In addition to this general work, also prepare a more detailed segment on one specific design pattern. How you and your partner decide to split the work is up to you, but there must be evidence that both have contributed to the assessment.

Guide

The following list provides a basic guide for how your report *may* be structured; it is not something that must be adhered to but ensure that you at least cover the following:

- Provide a synopsis of the history of design patterns in software development generally, including the pros and cons of such ways of thinking; be sure to include:
 - What are patterns and how can they be identified
 - How can we describe patterns
 - What is the underlying value proposition of using patterns in our work
 - Anything else you feel is important/relevant
- Then also present a specific design pattern for deeper analysis
 - The name, where it comes from, etc.
 - Describe the type of problem(s) it helps to solve
 - Effectively why the pattern has been introduced
 - Describe how the pattern can be put to work
 - Include pros and cons if applicable
 - Demonstrate with a simple example how the design pattern can be used to solve an actual problem
 - Use a live code example to demonstrate its effectiveness
 - Do not simply copy/paste an existing example and change the variable names, function names, etc. – be original

Patterns

While you are free to focus on any relevant pattern, the following patterns relate most directly to the work we will undertake in the remainder of the course:

- Constructor pattern
- Module pattern
- Singleton pattern
- Observer pattern
- Prototype pattern
- Mixin pattern
- MV*

Requirements

- This assessment will be completed in groups of 2
- The textbook for this part of the course (JavaScript Design Patterns by Addy Osmani) along with a minimum two additional resources should be referenced and adequately cited

Deliverables

A single web page on the design pattern must be delivered. Please have one partner upload a zip archive of your research notes, planning docs, sample demo code, and final web page report (self-contained) for this assessment.

If you have any questions regarding this assignment, be sure to seek guidance from your instructor.