

Project Description

Design and implement **an object-oriented web application** by choice. It could be a simple game (e.g. Snake, Chess, Backgammon, Minesweeper, Tetris, Xonix or other), component library (windows, buttons, text boxes, menus, etc.), business application (e.g. car store, auction, movie rental, bug tracker, knowledge management system, e-library, text editor), or any other. You are absolutely **free to choose the topic of your work**.

General Requirements

Please define and implement the following assets in your project:

- **Implement OOP design** (implement the application logic using objects, modules and data hiding)
 - At least **3 modules** (namespaces)
 - At least **7 types of objects** ("classes")
- **Unit testing for all of the components**
 - Using Jasmine, QUnit or JsUnit
- **Use some kind of data storage** (localStorage, sessionStorage, SQLite, localDB, REST services, etc...)
- **The application must work in Google Chrome 26, Mozilla Firefox 21, Internet Explorer 9, Internet Explorer 10, Opera 12**
- **Usage of a structural JavaScript framework**
Backbone.js

Additional Requirements

- Follow the **best practices for OO design**: use data encapsulation, use exception handling properly, use inheritance, abstraction and polymorphism properly and follow the principles of strong cohesion and loose coupling.
- Obligatory use distributed revision control tool to keep your source code and for team collaboration (you might use <http://mercurial.selenic.com/> or <http://git-scm.com/>).