Final practice for certification

Part 1. Template design

1. Use version control system GitHub to create remote code repository for storing your final project
2. Create the application folder  structure:

**public =>**

**css => all your less files**

**vendor => jquery, bootstrap lib files**

**lib => all external plugins used**

**app => all js files used in project (not plugins, jquery and boostrap)**

**img => all images used in project**

**index.html => root file**

1. Make up subject (what is your site created for, is it a shop or a landing page) and sitemap (menu on the top and in the bottom of page) for your web project

Part 2. Mark up web pages

1. Please use adaptive use Bootstrap templates or smth like this to make web application cross-browser and cross-platform, examples:

* <http://www.bentdesignstudio.com/v2/2012/03/twitter-bootstrap-2-photoshop-template-psd/>
* <http://bootstrapbay.com/blog/bootstrap-resources/>

     2. Create the web-page structure using HTML5 that include:

* 1. Logo
  2. Top navigation bar
  3. Ability to login on page using cookies
  4. Main slider with images and info inside
  5. Content inside page
  6. Subscribe form
  7. Footer (with copy rights and little nav bar, extend some main points from top navigation bar)

     3. Use SEO knowledge for your web project pages got from the previous step:

* + Use the  "title" tag with unique descriptions for each page
  + Use the  "description", "keyword"  meta tag with unique descriptions for each page too
  + Make your site easier to navigate
  + Make effective use of robots.txt by page including into search results

      4. Modify CSS “cascade” styles for your preference, apply sprites from spritesheets for image optimization (use sprites instead of a lot of images)

      5. Apply Normalize and reset.css files to your project, also please use [html5shiv](https://www.google.com.ua/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=html5shiv))

      6. Use gradients, 2D and 3D transformation for images on page.

      7. Use CSS preprocessor (Less, Stilys or SASS)

* Install preprocessor
* Create a style rules with it’s syntax using variables, mixin, color functions and embed them to the web project
* Compile \*.less to \*.css

Part 3. Add some dynamics to web project

1. Add a feedback form with combobox, checkbox, textbox, datepicker, button to the frontend  web project by using JavaScript
2. Use Bootstrap tools to make a slideshow by applying a touchswipe carousel
3. JSON-file data getting
4. Create JSON-file with data according to the chosen subject
5. Pull out JSON-file to webserver (for example <https://www.heroku.com/> )
6. Read data from JSON-file and display them on the page in the table's form using AJAX

Part 5. JavaScript Plugins applying

1. Add sorting according to table columns using existing plugins
2. Add the filter to the table data by any field using existing plugins
3. Add paging view possibility (and navigating across pages) for showing table data by parts using existing plugins, for example: http://www.dynatable.com/?utm\_source=html5weekly&utm\_medium=email&perPage=50&queries[search]=ukraine
4. Use any task manager (such as GRUNT, GULP, Broccoli) for minification, optimizathion the frontend  web project (create sprites, uglify js and create css files from grunt or gulp tools)