

# **Software Design Document**

**for**

## **E010 Show Sample Reviews**

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## Development Team

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## Original Problem:

When a student is assigned a review task in Expertiza, he/she will be presented a questionnaire, and then he/she need to give 0-5 points to each question and add comment for each question to complete the review process. However, it is always nice to know the existing good review of a similar assignment, knowing that could help student know what is expected in the review and how his/her review could help improve other's work.

# Use Cases:

1. A user login Expertiza, go to assignment page:

Assignment	Course	Topic	Current Stage	Stage Deadline	Publishing Rights
Final project	CSC 517 Fall 2010	—	submission	2010-11-15 23:30:00 UTC	denied
Wiki textbook 2	CSC 517 Fall 2010	—	Unknown	Unknown	denied
OSS project	CSC 517 Fall 2010	—	rereview	2010-11-14 04:30:00 UTC	denied
Backchannel application	CSC 517 Fall 2010	—	Complete	Complete	denied
Wiki textbook	CSC 517 Fall 2010	—	Complete	Complete	denied

2. He/She click a assignment that needs to be reviewed

## Submit or Review work for OSS project

Next: Click the activity you wish to perform on the assignment titled: OSS project

- [Signup sheet](#) (Sign up for a topic)
- [Your team](#) (View and manage your team)
- [Your work](#) (Submit and view your work)
- [Others' work](#) (Give feedback to others on their work)
- [Your scores](#) (View feedback on your work)
- [Change your handle](#) (Provide a different handle for this assignment)

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3. He/she click **Others' work** link, he will see a new clickable link called "See a example of good review".

### Assignments

## Reviews for OSS project

OSS project Review 1	<a href="#">View</a>	<a href="#">Edit</a>	<b>New!</b>	<a href="#">See a example of good review</a>
OSS project Review 2	<a href="#">View</a>	<a href="#">Edit</a>	<b>New!</b>	<a href="#">See a example of good review</a>

## Metareviews cannot be performed at this time

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4. He/she click "See an example of good review" link; he/she will see the previous review of a similar assignment that had a high meta-review score.

Submitted Files [hide files](#)

Name	Size	Type	Date Modified
** /local/pg/pg_data/efg/csc517/f10/csc517/f10/oss/42/CodeReview.zip	314513	file	Mon Oct 25 00:36:02 -0400 2010

Review [hide review](#)

Last reviewed: Wednesday October 27 2010, 09:06PM

**Question 1:** *Has this team avoided duplication of code?*

Score: 5 out of 5

Response:

**Question 2:** *Has this team incorporated design patterns into its code?*

Score: 5 out of 5

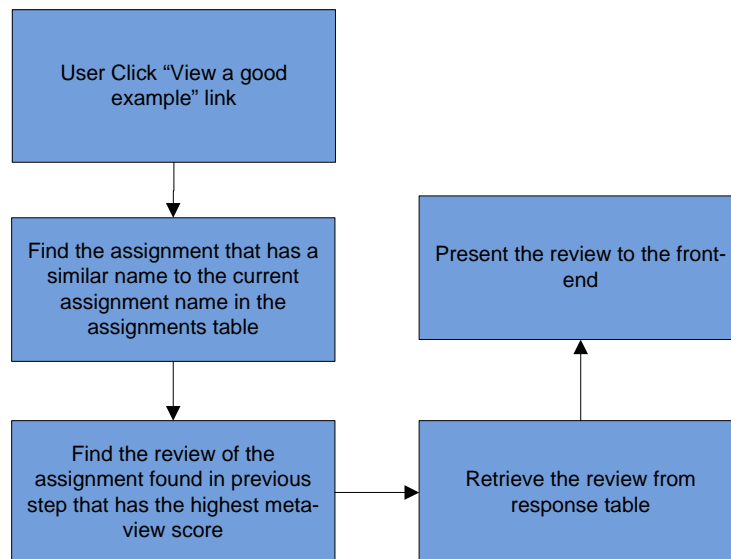
**Response:** No, Not that I am aware of. But display content of submitted file does not require any design pattern to implement  
update:since no design pattern is required in this implementation, I will give 5 for this.

**Question 3:** *Has this team provided adequate comments in their code?*

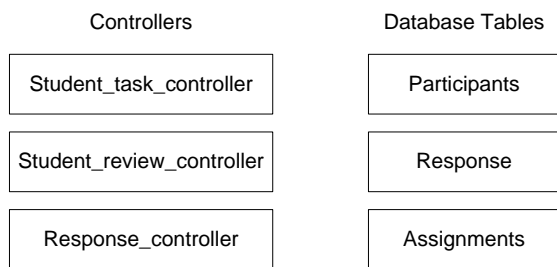
Score: 4 out of 5

**Response:** there is some comment, but some of the major code addition is not commented

## System Flow



# System Hierarchy



## Import Implementation of Functions:

*Public Assignment findSimilar (Assignment a)*

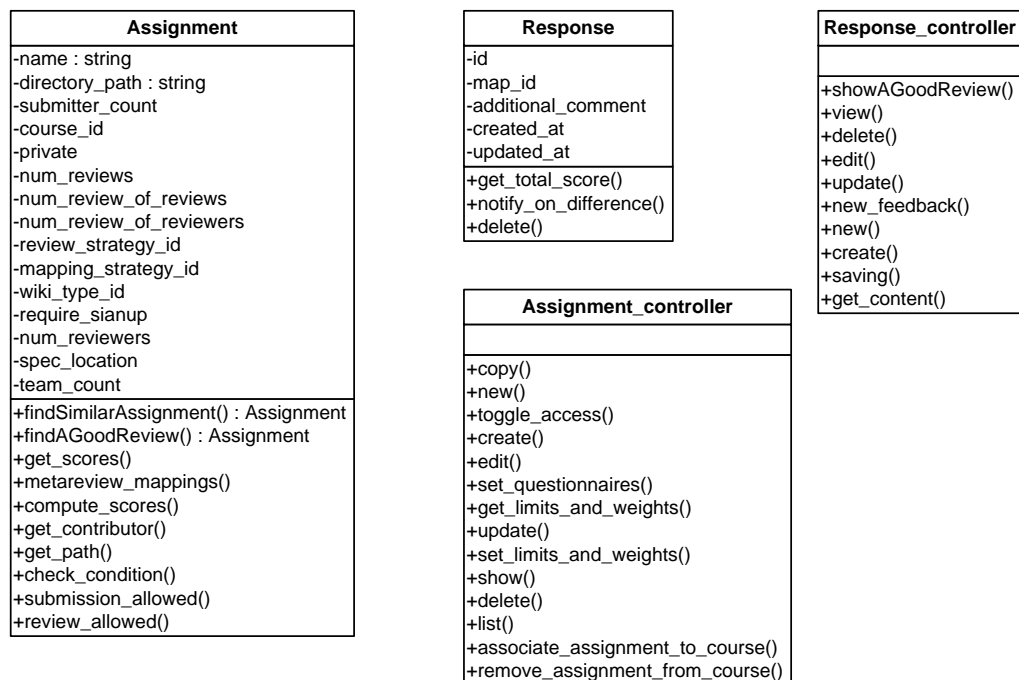
Description: this function returns a similar assignment object from the Assignments table whose name is similar to name of the input assignment.

*Public Response findGoodReview (Assignment a)*

Description: this function returns a response object from Response table which has the highest meta-review score and is the review of the input assignment.

## Class Diagram

Based on our implementation, I listed classes that are actively involved in the project. See diagram 1-1.



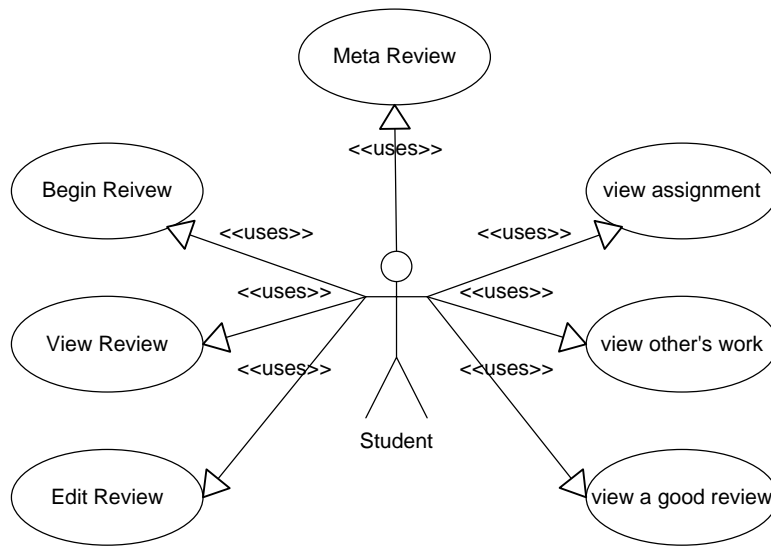
Class Diagram 1-1

## Testing Strategies

The Use Case below demonstrated different testing scenarios that we need to cover during the testing phase.

Our testing strategies include the following steps:

1. Filled database with sample data using admin tool of Expertiza.
2. System flow test, test the system response mention in the Testing Use Case diagram
3. Functionality test, test the critical functions, make sure system can identify similar assignment and high scored review for that particular assignment
4. Exhaustive test, make sure system can display the right good review during different stages of the assignment (submission stage, review stage, meta-review stage etc.)
5. Compatibility test, make sure pages are rendered correctly under different operating systems and browsers (Internet Explorer V6.0 and above, Mozilla Firefox 3 and above)



Testing Use Case

## Challenges

1. Algorithm to search similar topics given a known topic
2. Approach to determine the score of a specific review that can represent the quality of it
3. Scalability issues: how to optimize the speed of search when dealing with large database