CSC318 Assignment 2: Heuristic Evaluation of MarkUs

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1.

Problem: There is no indication of what "after" means, especially after the first eight-hour period has already been accounted for. It is also unclear whether the penalty period deduction is supposed to be cumulative or simply the deduction for that particular period.
Violated Heuristics: H4 (Consistency), H8 (Design), H10 (Help)

Severity (ANSAF): 1	**Severity (DHARAMDASANI):** 2

2.

Problem: An instructor cannot upload a class list. The error message shown above is displayed when the instructor tries to perform this action. The error message is unhelpful and does not indicate a clear solution to the problem.
Violated Heuristics: H1 (Visibility of system status), H2 (Real World), H5 (Prevention), H9 (Recovery), H10 (Help)

Severity (ANSAF): 3	**Severity (DHARAMDASANI):** 3

3.

	USER NAME ▲	LAST NAME	FIRST NAME	SECTION	GRACE CREDITS LEFT	NOTES
☐	student1	Shelton	Blake	L0101	3 / 3	Edit | Notes (0)
☐	student2	Williams	Wendy	L0201	0 / 0	Edit | Notes (0)
☐	student3	Jessica	Sarah	L0501	1 / 1	Edit | Notes (0)
☐	student4	Minaj	Nicki	L0501	0 / 0	Edit | Notes (0)
☐	USER NAME ▲	LAST NAME	FIRST NAME	SECTION	GRACE CREDITS LEFT	NOTES

Problem: Upon adding a new student, only the grace credits left can be assigned. There is no obvious way to add the total number of grace credits that every student starts out with.
Violated Heuristics: H10 (Help)

Severity (ANSAF): 2	**Severity (DHARAMDASANI):** 2

4.

Problem: The lecture section for each student is not displayed anywhere on the Manage Groups screen, which is particularly problematic if the instructor wants students to form groups within their own sections.
Violated Heuristics: H2 (Real World), H5 (Recognition)

Severity (ANSAF): 2	**Severity (DHARAMDASANI):** 3

5.

Problem: The lecture sections displayed next to the groups are inaccurate e.g. student1 and student2 of group_0004 are in L0101 and L0201 respectively, yet their lecture section is L0101.	
Violated Heuristics: H2 (Real World), H4 (Consistency), H5 (Recognition)	
Severity (ANSAF): 2	**Severity (DHARAMDASANI):** 2

6.

Problem: The instructor is unable to check the annotations and overall comments on the marked assignments. Only the final mark and the raw data file is available to the instructor.	
Violated Heuristics: H2 (Real world)	
Severity (ANSAF): 3	**Severity (DHARAMDASANI):** 3

7. (a)

(b)

Problem: There are some inconsistencies regarding assignment submissions and due dates. For instance, for the assignment "scenario1: Usability Testing" in (a), 0/6 submissions are shown to be collected but all 6 seem to have been marked, which is slightly confusing. In (b), both the assignments are due at the same time, however, one is marked in red (overdue) and the other is marked in green.
Violated Heuristics: H2 (Real World), H4 (Consistency), H6 (Recognition)

Severity (ANSAF): 1	**Severity (DHARAMDASANI):** 2

8.

Problem: It is not particularly obvious how a 5% grade adjustment can be carried out. It is assumed that this needs to be done individually for each student, which can be quite time-consuming if an instructor has a large number of students.
Violated Heuristics: H2(Real World), H4 (Consistency), H6 (Recognition), H10 (Help)

Severity (ANSAF): 4	Severity (DHARAMDASANI): 3

9.

Problem: After one criterion is saved successfully, its details still remain on screen (shown on the right) until the name of the next criterion is entered on the left. This can be quite confusing for the user and changes could accidentally be made to the already saved criterion.
Violated Heuristics: H8 (Design)

Severity (ANSAF): 1	Severity (DHARAMDASANI): 1

10.

Problem: There is no clear way to save, revise or refer back to assignments that have already been marked. In order to do any of the aforementioned, the entire submission needs to be marked again. This is particularly troublesome when graders are assigned based on criteria, because it requires each grader to revisit the work of others and add to it.	
Violated Heuristics: H3(Control), H6 (Recognition), H7 (Flexibility), H9 (Recovery)	
Severity (ANSAF): 2	**Severity (DHARAMDASANI):** 3

11.

Problem: Every TA has the freedom to release/unrelease marks. This should not be allowed, as it can cause unnecessary confusion between instructors and TAs. Instead, only the instructor or one of the TAs should have the option of releasing/unreleasing marks.	
Violated Heuristics: H5 (Prevention), H7 (Flexibility)	
Severity (ANSAF): 1	**Severity (DHARAMDASANI):** 2

12.

	Problem: It is difficult to keep track of all the icons used to show the various marking stages. The user has to hover over each icon to understand what it means.
	Violated Heuristics: H4 (Consistency), H6 (Recognition)
Severity (ANSAF): 2	Severity (DHARAMDASANI): 2

13.

	Problem: The tutorial attendance marks for only ten students could not be released from both the instructor and TA accounts. The "Loading..." message was displayed for over five minutes to no avail.
	Violated Heuristics: H1 (Status), H3 (Control), H5 (Prevention), H9 (Recovery), H10 (Help)
Severity (ANSAF): 3	Severity (DHARAMDASANI): 4

14.

Problem: Graders are required to check the "Apply late penalty" box if a lateness penalty has been specified. Not only is this a redundant step, it is also dangerous because failure to click this box for one or two students due to forgetfulness can have drastic outcomes.	
Violated Heuristics: H3 (Control), H5 (Prevention), H8 (Design)	
Severity (ANSAF): 1	**Severity (DHARAMDASANI):** 2

15.

Problem: The summary page on TA accounts is unavailable.	
Violated Heuristics: H5 (Prevention), H9 (Recovery)	
Severity (ANSAF): 3	**Severity (DHARAMDASANI):** 3

16.

ActionController::UrlGenerationError in Assignments#index

Showing /data/markus/instance/028/app/views/assignments/_list_manage.html.erb where line #56 raised:

No route matches {:action=>"browse", :controller=>"submissions", :id=>#<Assignment id: 6, short_identifier: "scen1_pr", description: "Scenario 1: Attempt 2", message: nil, due_date: "2017-03-05 04:59:00", group_min: 1, group_max: 1, created_at: "2017-03-07 19:15:32", updated_at: "2017-03-07 19:15:32", student_form_groups: nil, group_name_autogenerated: nil, group_name_displayed: nil, repository_folder: "scen1", invalid_override: nil, results_average: nil, allow_web_submits: true, section_groups_only: nil, section_due_dates_type: false, display_grader_names_to_students: false, enable_test: false, notes_count: 0, assign_graders_to_criteria: false, rubric_criteria_count: nil, flexible_criteria_count: nil, groupings_count: nil, tokens_per_period: 0, allow_remarks: true, remark_due_date: nil, remark_message: nil, results_median: nil, results_fails: nil, results_zeros: nil, outstanding_remark_request_count: nil, unlimited_tokens: false, is_hidden: true, only_required_files: nil, vcs_submit: false, token_start_date: nil, token_period: 1.0, parent_assignment_id: 3, has_peer_review: false, checkbox_criteria_count: nil, enable_student_tests: false>, :locale=>:en}

Extracted source (around line #56):

```
54              <% if assignment.has_peer_review? %>
55                <% if assignment.pr_assignment.is_hidden %>
56                  <%= link_to t('assignment.hidden',
57                        assignment_text: t('results.review_for') + assignment.short_identifier),
58                      { controller: controller,
59                        action: action,
```

Trace of template inclusion: app/views/assignments/grader_index.html.erb

Rails.root: /data/markus/instance/028

Application Trace | Framework Trace | Full Trace

app/views/assignments/_list_manage.html.erb:56:in `block in _app_views_assignments__list_manage_html_erb__2186462452226241069_55107740'
app/views/assignments/_list_manage.html.erb:17:in `_app_views_assignments__list_manage_html_erb__2186462452226241069_55107740'
app/views/assignments/grader_index.html.erb:6:in `_app_views_assignments_grader_index_html_erb__2985708425793223601_54004840'
app/controllers/assignments_controller.rb:241:in `index'

Request

Parameters:

{"locale"=>"en"}

Toggle session dump

Toggle env dump

Problem: Logging in as a TA gave the error message shown above, due to which we had to reset all our data. The error message is unhelpful and does not provide a clear solution to the problem.	
Violated Heuristics: H1 (Visibility of system status), H2 (Real World), H3 (Control), H5 (Prevention), H9 (Recovery), H10 (Help)	
Severity (ANSAF): 4	**Severity (DHARAMDASANI):** 4

17.

Repository::FileDoesNotExist in AssignmentsController#student_interface

scenario1/ does not exist in the repository for revision 3

Extracted source (around line #675):

```
673        entries = @repos.fs.root(revision_number).dir_entries(path)
674     rescue Exception
675        raise FileDoesNotExist.new("#{path} does not exist in the repository for revision #{revision_number}")
676     end
677     entries.each do |key, value|
678        entries[key] = (value.kind == 1) ? :file : :directory
```

Rails.root: /data/markus/instance/028

Application Trace | Framework Trace | Full Trace

```
lib/repo/subversion_repository.rb:675:in `rescue in __get_files'
lib/repo/subversion_repository.rb:672:in `__get_files'
lib/repo/subversion_repository.rb:1041:in `files_at_path_helper'
lib/repo/subversion_repository.rb:994:in `files_at_path'
app/models/grouping.rb:509:in `number_of_submitted_files'
app/controllers/assignments_controller.rb:129:in `student_interface'
```

Request

Parameters:

```
{"locale"=>"en",
 "id"=>"1"}
```

Toggle session dump

Toggle env dump

Response

Headers:

Problem: This error message was displayed when students tried to submit one of their assignments. The cause of this error is unknown. The error message is unhelpful and does not indicate a clear solution.	
Violated Heuristics: H1 (Visibility of system status), H2 (Real World), H3 (Control), H5 (Prevention), H9 (Recovery), H10 (Help)	
Severity (ANSAF): 4	**Severity (DHARAMDASANI):** 4

18.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	student4		0		1		1		1.2		0.8			0/0					
2	student5		0		1		1		1.2		0.8			0/0					
3	student8		0		1		1		1.2		0.8			0/0					
4	student1	76.25	3.05	1	1	0.75	1	0.9	1.2	0.4	0.8	0	0	03-Mar					
5	student9		0		1		1		1.2		0.8			0/0					
6	student10		0		1		1		1.2		0.8			0/0					
7	student2	142.5	5.7	1	1	0.5	1	1.2	1.2	0	0.8	3	0	0/0					
8	student3		0		1		1		1.2		0.8				01-Jan				
9	student7		0		1		1		1.2		0.8			0/0					
10	student6		0		1		1		1.2		0.8			0/0					
11																			
12																			
13																			

Problem: When a detailed CSV report of student marks is downloaded, the report looks very disorganized. It has no headers to indicate what the marks in a particular column are for, which makes it unfit for use.	
Violated Heuristics: H2 (Real World), H4 (Consistency), H6 (Recognition), H8 (Design), H10 (Help)	

Severity (ANSAF): 1	**Severity (DHARAMDASANI):** 2

19. (a)

(b)

Problem: Peer-review could not be accomplished because the list of reviewers was unavailable (shown in (a)), even after refreshing the page several times and logging in and out of MarkUs. It could not be undone either (shown in (b)), due to which a new assignment had to be created.
Violated Heuristics: H1 (Status), H3 (Control), H5 (Prevention), H7 (Flexibility), H9 (Recovery), H10 (Help)

Severity (ANSAF): 3	**Severity (DHARAMDASANI):** 4

20.

Problem: When a new assignment is created, if the identifier name is the same as another one that already exists, the assignment cannot be created. An error message detailing the cause of this problem is not displayed.	
Violated Heuristics: H1 (Status), H2 (Real World), H5 (Prevention), H10 (Help)	
Severity (ANSAF): 3	Severity (DHARAMDASANI): 3

21.

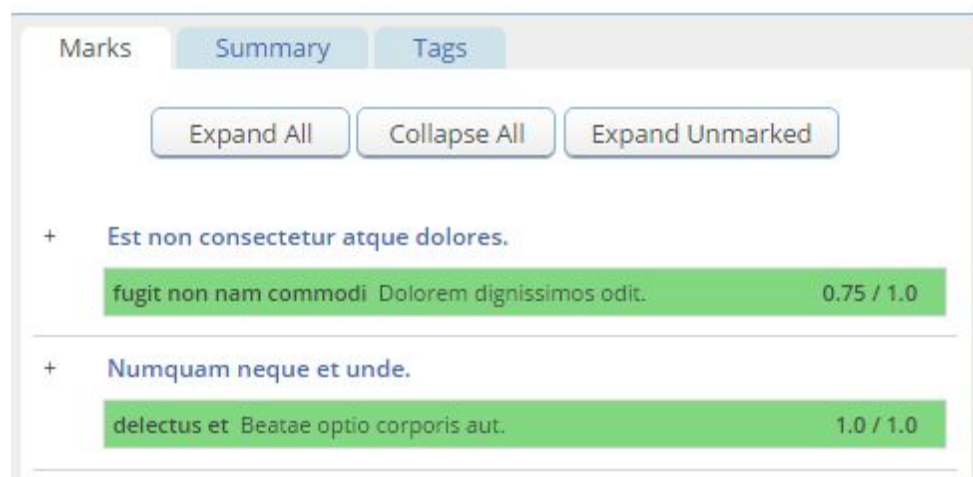| Problem: If the instructor wants to add sections that are weighted by percentage, the instructor must manually calculate what weights to add to each section in order to create percentage weighted sections. If the instructor removes a section, they must also update each section's weight.	
Violated Heuristics: H7 (Flexibility), H8 (Design)	
Severity (ANSAF): 2	Severity (DHARAMDASANI): 2

22.

	Problem: Automatic collection of outstanding submissions should be added, so the late submission policy and collection for marking is automated and error free.
Violated Heuristics: H7 (Flexibility), H8 (Design)	
Severity (ANSAF): 2	Severity (DHARAMDASANI): 3

23.

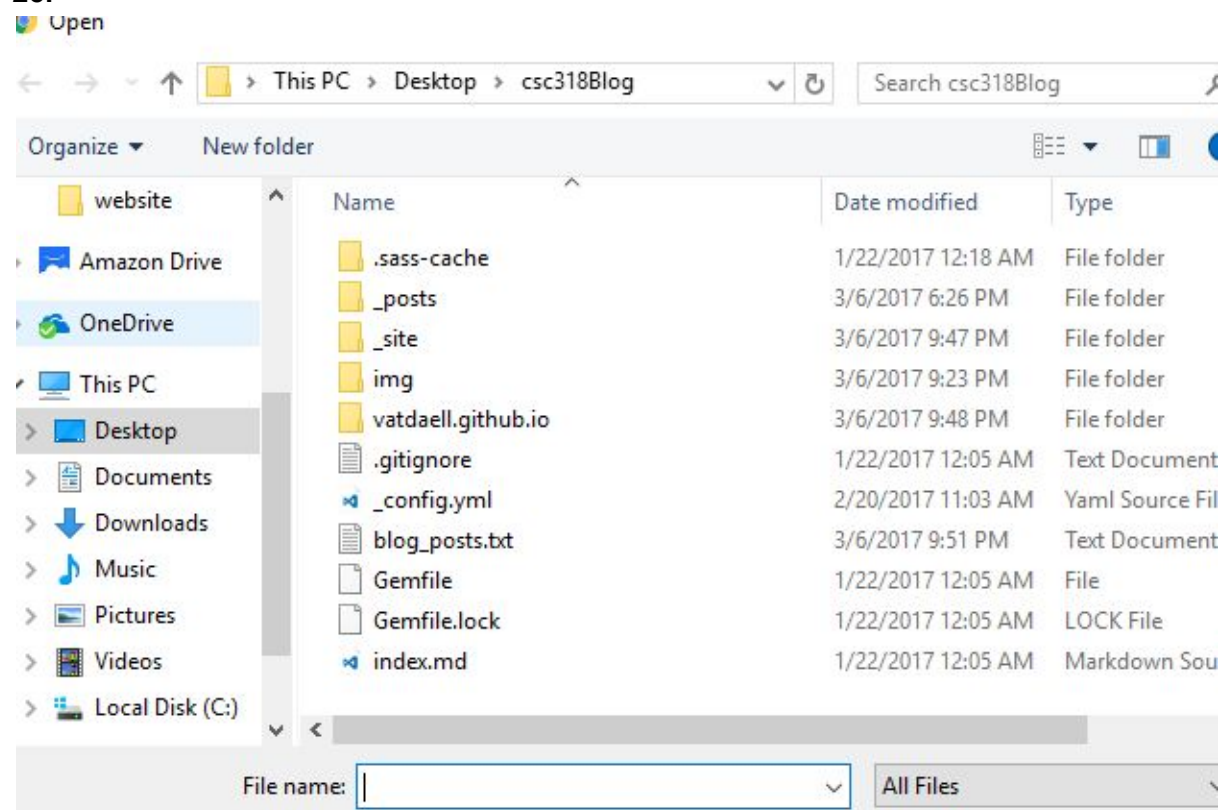|	Problem: During the process of editing marks or selecting marks for sections with predefined grades, the user needs to click on them in order to set the mark. The clickable region is not immediately obvious.
Violated Heuristics: H4 (Consistency), H7 (Flexibility), H8 (Design)	
Severity (ANSAF): 2	Severity (DHARAMDASANI): 1

24.

Problem: When a student tries to invite another student to form a group, recognition becomes an issue since most students do no not remember their partner's username. Allowing students to invite others using their names is a much better idea since it is a better recognition tool than a student's username.
Violated Heuristics: H4 (Consistency), H6 (Flexibility) , H7 (Flexibility), H8 (Design)

Severity (ANSAF): 2	**Severity (DHARAMDASANI):** 3

25.

Problem: When submissions for marking offline are collected and downloaded, the grader receives a zipped file with repository names instead of student names. This is problematic since there is a recognition issue with repository names and the search feature in MarkUs is for the name user field.

Violated Heuristics: H4 (Consistency), H6 (Recognition), H7 (Flexibility)

Severity (ANSAF): 1	**Severity (DHARAMDASANI):** 2