

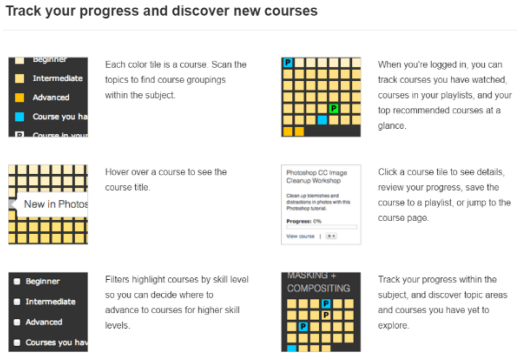





ID Number: 0001	Problem/Good Aspect: Problem
Name: Symbol and Color Irrelevance	
Relevant Heuristic: 2. Match Between System and the Real World	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Screen</p> <p>[ABOUT] Two subjects “IT” and “Marketing” have same symbols and colors</p> <p>[RESULT] Only two subjects that have the same color and symbol does not make information appear in a natural order</p>	
Detailed Explanation: <p>Every subject in the learning matrix screen contains a different symbol and color. However the two subjects “IT” and “Marketing” which are beside each other have the same symbols and colors. For a user who is unfamiliar with both IT and marketing the associations between these two subjects is unknown. If every single subject consists of a different color and symbol besides two which are beside each other, a user who is unfamiliar with these two subjects will notice this violation in color and symbol pattern.</p>	
Severity: 1 (cosmetic)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix screen is opened</p> <p>[IMPACT] Easy to overcome; often missed unless user pays attention to detail</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

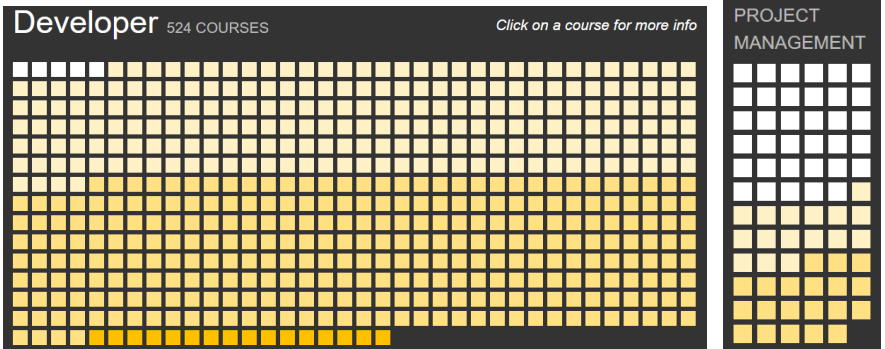
ID Number: 0002	Problem/Good Aspect: Problem
Name: Unhelpful User Tips	
Relevant Heuristic: 2. Match Between System and the Real World	
Evidence of Issue:  [LOCATION] Learning Matrix Screen [ABOUT] “User tips” selection appears in learning matrix screen [RESULT] Presence of “User tips” selection in learning matrix screen does not make information appear in a natural and logical order	
Detailed Explanation: “User tips” selection appears in learning matrix screen and information provided when “User tips” selection is clicked (learning matrix help screen appears) only explains functionality associated to courses which is irrelevant to subject selection. It does not make sense to learn functionality associated to courses when a subject has not been selected.	
Severity: 2 (minor)	
Justification of Severity: [FREQUENCY] Occurs every time learning matrix screen is opened [IMPACT] Easy to overcome; may annoy user initially due to irrelevant information [PERSISTENCE] One-time problem that user can overcome once acknowledged	


ID Number: 0003	Problem/Good Aspect: Problem
Name: Unordered User Tips	
Relevant Heuristic: 2. Match Between System and the Real World	
<p>Evidence of Issue:</p>  <p>[LOCATION] Learning Matrix Help Screen</p> <p>[ABOUT] User tips are logically unordered</p> <p>[RESULT] User tips that are equally spaced in learning matrix help screen may not be perceived in logical order</p>	
<p>Detailed Explanation:</p> <p>Conventions for perceiving information in learning matrix help screen would mostly likely occur from left to right then down (ex reading a page of a book) or top to bottom then right (ex reading a newspaper). If the user perceives information from top to bottom then right, it will be in logical order (ex first column talks about course selection and second column talks about course progress). Else the user perceives information from left to right then down which will not be in logical order.</p>	
Severity: 2 (minor)	
<p>Justification of Severity:</p> <p>[FREQUENCY] Occurs every time learning matrix help screen is opened</p> <p>[IMPACT] Easy to overcome; may irritate user initially due to information that does not appear in logical order</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

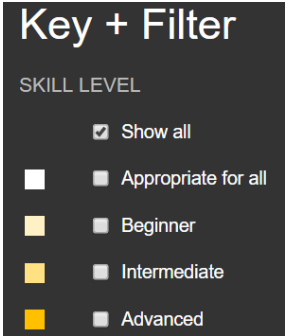
ID Number: 0004	Problem/Good Aspect: Problem
Name: Back to Learning Matrix Confusion	
Relevant Heuristic: 3. User Control and Freedom	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] “Learning matrix” text is unclickable</p> <p>[RESULT] User is unable to make a fast exit out of a subject page and into sub home page for subjects</p>	
Detailed Explanation: <p>It is a standard convention in web applications to have a clickable icon or large text on the top left of a page which directs back to the home page (ex Wikipedia, Facebook, Amazon). Spanning on this logic, “Learning matrix” is a large text on the top left of a page that could direct back to the sub home page for subjects but it is unclickable. “See all subjects” selection on the top right is clickable and will direct back to the sub home page for subjects. However, “See all subjects” selection is in small text which may be hard to find.</p>	
Severity: 2 (minor)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Easy to overcome; may confuse user initially because large text on top left is not clickable whereas a small text on top right is clickable to get back to sub home page</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

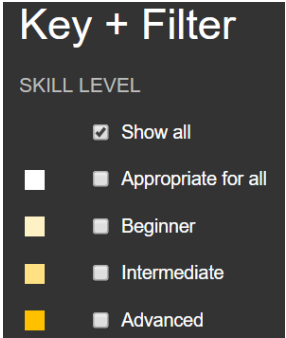
ID Number: 0005	Problem/Good Aspect: Problem
Name: Course Description Blockage	
Relevant Heuristic: 3. User Control and Freedom	
Evidence of Issue:  [LOCATION] Learning Matrix Subject Screen [ABOUT] Course description does not disappear unless clicked outside description box [RESULT] User is unable to exit course description quickly	
Detailed Explanation: Course description does not disappear when hover out of description box or scrolling is applied and will only disappear when clicked outside description box. To make matters worse, while course description is present, any course title that occupies location of course description will be sent behind course description. This prevents users from reading the full course title and may deter user from selecting this course.	
Severity: 4 (critical)	
Justification of Severity: [FREQUENCY] Occurs every time learning matrix subject screen is opened [IMPACT] Hard to overcome; user may think service isn't fully functional [PERSISTENCE] User will be repeatedly bothered by this problem	

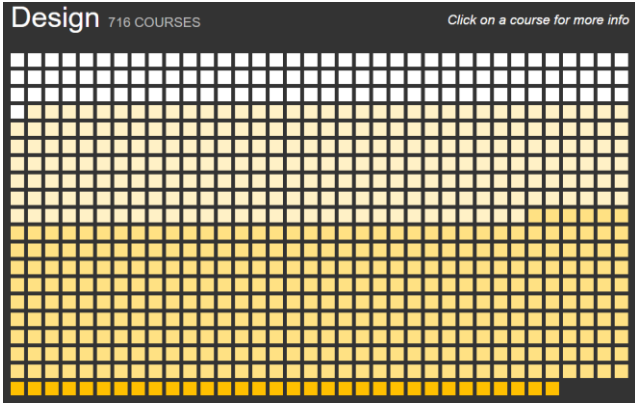
ID Number: 0006	Problem/Good Aspect: Problem
Name: Fast Course Title View Limitation	
Relevant Heuristic: 3. User Control and Freedom	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] Course titles will not show when quick hovering is applied</p> <p>[RESULT] User is unable to exit current course title quickly to see other course titles</p>	
Detailed Explanation: <p>Quick hovering over courses (towards right direction and into current course title) prevents other course titles (courses under current course title) from being displayed. This prevents users from reading course titles and may deter user from selecting affected courses. In this situation, current course title will disappear only when hover out of course title box is applied.</p>	
Severity: 3 (major)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Hard to overcome; prevents user from using service efficiently</p> <p>[PERSISTENCE] User will be repeatedly bothered by this problem</p>	

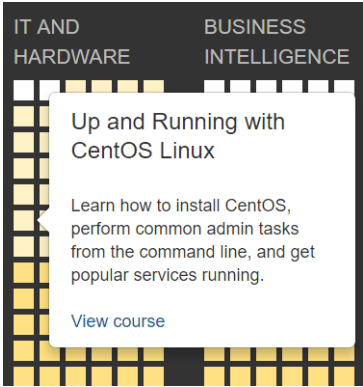
ID Number: 0007	Problem/Good Aspect: Problem
Name: Unseparated Course Skill Levels	
Relevant Heuristic: 5. Error Prevention	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] Courses of different skill levels are in the same row</p> <p>[RESULT] User may have an error in selecting a course of a desired skill level</p>	
Detailed Explanation: <p>Both all course non-topic display and all course topic display does not separate courses into different rows that correspond to different skill levels. Either through eye fatigue or strain, bad vision, vision impairment, color blindness, or even a quick browse may cause the user to mistakenly select a course of a different skill level than intended (assuming different skill levels are displayed).</p>	
Severity: 2 (minor)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Easy to overcome; user needs to pay more attention to colors/color shading that corresponds to different skill levels</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	


ID Number: 0008	Problem/Good Aspect: Problem
Name: Ajax Course Skill Level Filter Update Failure	
Relevant Heuristic: 5. Error Prevention	
Evidence of Issue: <div>  <p>The evidence consists of two screenshots of the CAD Learning Matrix Subject Screen. Both screenshots show a grid of course tiles on the left and a 'Key + Filter' section on the right. The 'Key + Filter' section has a 'SKILL LEVEL' dropdown menu. In the top screenshot, the 'Show all' option is selected. In the bottom screenshot, all skill level options ('Appropriate for all', 'Beginner', 'Intermediate', 'Advanced') are selected, and 'Show all' is also selected. In both cases, the course display area is empty, indicating that no courses are being displayed due to the filter settings.</p> </div> <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] All course non-topic display does not update</p> <p>[RESULT] User may have an error finding courses of a desired skill level</p>	
Detailed Explanation: <p>Selection of “Appropriate for all” and/or “Beginner” and/or “Intermediate” and/or “Advanced” option (but not selection of all options) followed by selection of “Show all” option will not update on all course non-topic display. Once the user has made these two sequential actions, courses of other skill levels is not displayed. The notion of selecting “Show all” option and seeing that there are no courses that is suitable towards the user’s skill level deters the user away from service.</p>	
Severity: 4 (critical)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Hard to overcome; user may think there are no courses for a skill level or skill levels</p> <p>[PERSISTENCE] User will be repeatedly bothered by this problem</p>	

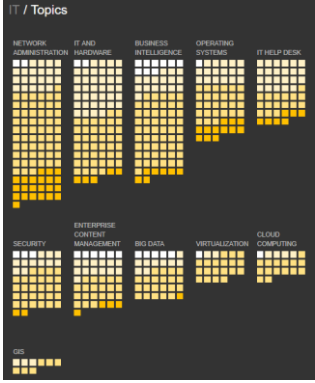
ID Number: 0009	Problem/Good Aspect: Problem
Name: Forgettable Course Filter	
Relevant Heuristic: 6. Recognition rather than Recall	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] Course filter is reset to “Show all” option upon page reload</p> <p>[RESULT] User needs to recall filter settings</p>	
Detailed Explanation: <p>Given a user who is a spectator to the service (not logged in), cookies and local storage is not taken into consideration to remember settings. As a result, if the user configures filter settings on Learning matrix subject screen and then refreshes screen or moves out of this screen and then back into learning matrix subject screen, then filter settings will be lost (default is selection of “Show all” option). This requires a spectator user to remember filter settings that they previously selected.</p>	
Severity: 1 (cosmetic)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Easy to overcome; not a concern for a user who is logged in</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

ID Number: 0010	Problem/Good Aspect: Problem
Name: Undescriptive Filter	
Relevant Heuristic: 6. Recognition rather than Recall	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] No description for skill level options (beginner, intermediate, advanced)</p> <p>[RESULT] User needs to recall meaning of each skill level</p>	
Detailed Explanation: <p>For users who are new to the service, skill levels “Beginner”, “Intermediate”, and “Advanced” lacks description in filter and “User tips” (learning matrix help screen). New users must experiment with courses of different skill levels in order to remember and gain insights on what differentiates courses apart by skill levels.</p>	
Severity: 2 (minor)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Easy to overcome; only impacts users who are new to service</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

ID Number: 0011	Problem/Good Aspect: Problem
Name: Total Course Overload	
Relevant Heuristic: 7. Flexibility and Efficiency of Use	
Evidence of Issue:  <p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] Existence of all course non-topic display</p> <p>[RESULT] User selection of a desired course is slowed down</p>	
Detailed Explanation: <p>Inside every learning matrix subject screen for all subjects there exists all course non-top display that appears at the top of the screen. These courses are unsorted (by category) and requires user to perform an inefficient search for a desired course given that the user is trying to find a course of a specific category. The user may be dumbfounded when courses sorted by categories exists after scrolling down learning matrix subject screen.</p>	
Severity: 3 (major)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Hard to overcome; first impressions are important and new users might have wasted significant time searching for a course</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

ID Number: 0012	Problem/Good Aspect: Problem
Name: Longer Time Reading Descriptions	
Relevant Heuristic: 7. Flexibility and Efficiency of Use	
Evidence of Issue: 	
[LOCATION] Learning Matrix Subject Screen	
[ABOUT] Description text consists of sans-serif font	
[DEFAULT] Users read words with serif font faster than words with sans-serif font	
Detailed Explanation: <p>Serif fonts help improve readability for long text that consists of small font. Good examples of this can be found in books and newspapers. The reasoning is due to the fact that serifs in letters assists readers in cognitively interpreting letters which results in quicker interpretation of words associated to these letters.</p>	
Severity: 1 (cosmetic)	
Justification of Severity: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Easy to overcome; interpreting letters that form words occurs sub consciously</p> <p>[PERSISTENCE] One-time problem that user can overcome once acknowledged</p>	

ID Number: 0013	Problem/Good Aspect: Good
Name: Subject Mouse Hovering Animation Feedback	
Relevant Heuristic: 1. Visibility of System Status	
Evidence of Issue:  [LOCATION] Learning Matrix Screen [ABOUT] Subjects show description when mouse hovering occurs [RESULT] Keeps users informed about which subject is currently under a mouse hover through animation feedback	
Detailed Explanation: Subjects are equally distributed on learning matrix screen and renders a description when mouse hover over a single subject occurs. The minimal animation flipping design of subjects for mouse hovers replicates a natural method of comprehending physical information. It feels as if there is a table with squared shaped subject cards with the name on front and description on back. Spanning on this analogy, flipping on a subject card to read description can only occur one at a time and after reading description it must be flipped back to subject name. As a user of the application or an observer in the analogy, two consecutive flips (excluding initial flip) clearly indicates that one subject has been flipped back to subject name whereas another subject has been flipped to description.	
Benefit: 4 (critical)	
Justification of Benefit: [FREQUENCY] Occurs every time learning matrix screen is opened [IMPACT] Users can easily learn about subjects [PERSISTENCE] Users are never bothered	

ID Number: 0014	Problem/Good Aspect: Good
Name: Categories for Courses	
Relevant Heuristic: 7. Flexibility and Efficiency of Use	
Evidence of Issue: 	
<p>[LOCATION] Learning Matrix Subject Screen</p> <p>[ABOUT] Subjects contains courses that are categorized</p> <p>[RESULT] Drastically shortens time to select a course</p>	
Detailed Explanation: <p>Courses of any subject in learning matrix subject screen are categorized by topic in all course topic display. This drastically decreases time to search and select a desired course. If courses are not categorized at all (all course non-topic display) search for a desired course will be slow because a sequential scan of courses is required to find a desired course. Even when a desired course is found it is uncertain of how many related courses exist which would result in a full sequential scan being performed if the user wants to find and select the most suited course out of all related courses found.</p>	
Benefit: 4 (critical)	
Justification of Benefit: <p>[FREQUENCY] Occurs every time learning matrix subject screen is opened</p> <p>[IMPACT] Users can quickly select a desired course</p> <p>[PERSISTENCE] Users are never bothered</p>	