

Team 44 UI Evaluation, performed by Team 43

Issues Outstanding:

1. **NullPointerException thrown upon empty Registration fields, but no message of any kind given to User. This breaks the Nielsen heuristic of *Visibility of system status*.**
 - a. The users may want to know why they could not register. So, it would be nice to have a way to display error messages like a textfield.
 - b. Noted by Zihan, Alan, Jiahong
 - c. Severity Rating: 3 (Major)
2. No “Confirm Password” field in the Registration or Edit Profile process. This breaks the Nielsen heuristic of *Error prevention*.
 - a. This feature serves as a failsafe so even if the user typed in something that they didn’t intend to, the system can catch that error.
 - b. Noted by Zihan and Alan
 - c. Severity Rating: 2 (Minor)
3. Lack of validation with User emails; duplicates and valid domains. This breaks the Nielsen heuristic of *Error prevention*.
 - a. Email address not fully validated – email address such as “a@gmail” or “@gmail.com” are recognized as valid emails while they shouldn’t be. More comprehensive validation needs to be added so only valid emails can be entered into the system.
 - b. Noted by Alan, John, and Zihan
 - c. Severity Rating: 2 (Minor)
4. Organization of buttons on main screen is non-intuitive. This breaks the Nielsen heuristic of *Aesthetic and minimalist design*.
 - a. The buttons are all aligned together – might be hard for first time users to find the feature they are looking for. It would be nice to keep the actions with different report apart or separate by submitting or viewing actions.
 - b. Noted by Zihan
 - c. Severity Rating: 1 (Cosmetic)
5. View Map has an incorrect header (Registration) and an unusable menu bar. This breaks the Nielsen heuristic of *Aesthetic and minimalist design*.
 - a. The incorrect header is rather minor but the user may be confused by the title of a page.
 - b. And for the menu bar, It would be better if these buttons could be taken out since the users cannot use them and may get confused with that fact.
 - c. Noted by Alan and Zihan
 - d. Severity Rating: 3 (Major)
6. **Lack of validation for Type and Condition of both Reports. Users can enter arbitrary and invalid strings for Type, Condition, Virus PPM, and Contaminant PPM. This breaks the Nielsen heuristic of *Error prevention*.**

- a. This design requires the users to know the adequate types and conditions – which is not friendly to novice users. These textfields could be replaced with comboboxes or radiobuttons so even the novice users can operate the application (or an alternative way is to validate the textfields while submitting).
 - b. Noted by Alan, Zihan, Jiahong
 - c. Severity Rating: 3 (Major)
- 7. Edit Profile and User Profile screens could be combined. This breaks the Nielsen heuristic of *Flexibility and efficiency of use*.
 - a. The edit profile page displays empty fields even when the user has something in the profile – this design doesn't help users realize what's already in the profile while they are editing it.
 - b. Noted by Zihan
 - c. Severity Rating: 2 (Minor)
- 8. Edit Profile error messages with close the process without giving the User a chance to rectify their mistakes. This breaks the Nielsen heuristic of *Help users recognize, diagnose, and recover from errors*.
 - a. The users may want to have the option of fixing the error themselves and reuse what they have typed before. So, it would be better if this choice is left to the users. A fix to this problem could be to have the application return to edit profile page after displaying error message.
 - b. Noted by Zihan and Alan
 - c. Severity Rating: 2 (Minor)
- 9. Historical report screens missing entirely. This breaks the Nielsen heuristic of *Match between system and real world*.**
 - a. The wiki (which serves as a customer contract in this class) clearly requires a historical report feature and a way to view it. The customers will be very unhappy if an application is missing that.
 - b. Noted by Alan, John, and Zihan
 - c. Severity Rating: 4 (Catastrophic)
- 10. Map pins do not display the Latitude, Longitude, Reporter or Report Number. This breaks the Nielsen heuristic of *Recognition rather than recall*.
 - a. The current map pins only displays the type and condition. But the users may require more information like Latitude, Longitude, Reporter or Report Number.
 - b. Noted by Jiahong
 - c. Severity Rating: 1 (Cosmetic)
- 11. Latitude and Longitude input for both Reports can be non-numerically invalid. This breaks the Nielsen heuristic of *Error prevention*.
 - a. Both reports recognize string inputs as valid latitude and longitude while they should not be.
 - b. Noted by Jiahong
 - c. Severity Rating: 3 (Major)
- 12. Map not displayed when reports fail to load. This violates the Nielsen heuristic of *Visibility of system status*.
 - a. Noted by John
 - b. Severity Report: 2 (Minor)