



StuCo - Plaksha's Student Council Web App

A Human-Computer Interaction Project by

Team 7

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Introduction

Plaksha is our bustling and thriving university, which already has an energetic and cohesive student body despite being only a few years old. As that student body grows, the need for solutions serving it becomes increasingly apparent. Student life here is highly diverse, but organizing something like a club is primarily left to informal communication. Moreover, there is a lack of structured support for day-to-day problems in student life (plumbing, mess, academic issues, etc.). There is a student life office and perhaps a phone number to contact, but nothing really assists that chain.

WhatsApp is the prevailing solution encompassing student life. Plaksha students report, on average, being part of more than ten WhatsApp groups ranging from batch groups/hostel groups to academic class groups, creating a few broad issues:

- Students are unaware of mechanisms to seek help, as the necessary information is dispersed in message format and gets quickly buried under chats.
- Quiet/shy students are crowded out of such communications since these are primarily public chat groups. There is no anonymity in messaging.
- Student representatives, such as student council and committees, have only informal means of interacting with the student body. This lends itself to an asymmetric understanding of actual student problems by those who are supposed to lead.
- Perhaps most importantly, students disengage when they feel overwhelmed by many chat groups repeatedly spamming them.

There thus is a need for a better interface, between students and their stakeholders. Our Plaksha StuCo app seeks to address this, enabling students to access support mechanisms and providing centralized structured communication for the community.

Product Origin

Our HCI project team first met with Plaksha's Student Life team members, inquiring about the issues they were facing. They came to us with many splintered product ideas:

- A place for students to file complaints instead of email/WhatsApp, where they could interact and suggest solutions to problems.
- An information and announcements platform for the Student Council to help deal with student problems.
- Tech to help run student elections, including the election mechanism itself.

Using these, our team weaved together the prototype for a cohesive product: 'StuCo.'

Problem Statement

Our task was to build the student council web app to act as a place where students come for anything related to Plaksha. Be it important announcements or complaints they need addressing, this will be where communities interact, elections happen, and events are displayed. Essentially, it will act as the bridge between the many groups at Plaksha, giving a voice to everyone.

The Users

Our users are the campus community: A large undergraduate 'Gen Z' batch mixed with groups of postgraduate and Ph.D. students. We learned many product-relevant characteristics of this group initially and over time:

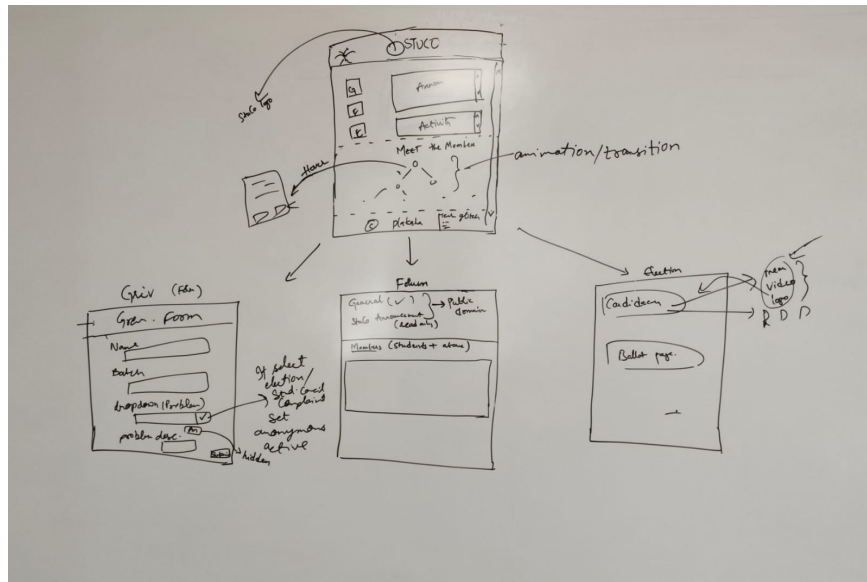
- First, they get bored easily. And we quickly noticed how many students were turned off by the idea of prototype testing when given one without color. Visual aesthetics would play a far more significant role than we imagined.
- Second, they explore a lot. We learned quickly how our users expected to be able to click everywhere despite our directions. This exploration also translates into an ability to grasp unfamiliar technologies rapidly.
- Third and perhaps most important is that this user base expects functionality to be device agnostic, informing our decision to create a web app rather than something device-specific.

Version 1

Methodology and process

In our first team meeting, we gathered our learnings from the student-life team and our understanding of the student body and consolidated them. We then agreed upon the following features for the web app:

- A landing page that displays essential announcements and links to other pages.
- A grievance form with an option of complaining anonymously
- A student forum with themes and sub-themes where students can communicate among themselves and where related announcements are made.
- An election page with nomination forms, an election room with all the candidates' information, and the voting portal.



(Version 1: Different functionalities branching from landing page, 04/09/2022)

For the next week, we divided the pages amongst ourselves and designed the first version of the wireframe using the Balsamiq wireframing tool. After a few edits, our first version had a total of eight pages:

- One landing page
- One page for the grievance form
- Two pages for 'Bak Bak,' the student forum, showing different workflows inside it
- Four pages for elections, with one page each for the nomination form, election room, voting login, and the ballot page.

We were ready for our first round of user testing

User Test and Feedback

We first approached the student life team with our prototype. We first emailed them the wireframe for testing, following it up with a meeting to get their feedback. In addition, we conducted a user test with one TLP student. The users returned with many points of feedback. Below are some important things they pointed out:

Workflow	Feedback	Learning
Overall	<p>> The color scheme was off-putting: This wasn't explicitly stated by users but was evident by their reactions.</p> <p>> Margin and 'box within a box' feel</p>	<p>> Need to provide consistency with Plaksha styles and themes. A better margin and font size.</p> <p>> Need to simplify/ reduce content</p>

	needed to be removed.	and focus on the positioning of elements.
Grievance	<p>> “How can users see what is happening with their complaints?”</p> <p>> “Should there be anonymous form options? How can we stop users from abusing such functionality?”</p>	<p>> Need to implement a ‘Grievance Tracker’ for this flow.</p> <p>> Need an anonymous button for the form.</p>
Student Forum	> This functionality was well received, especially the name.	-
Elections	> While the Student Life team liked the initial Candidates Room,’ students found it overcrowded with information.	> Election Room needs to be rethought, with information reduction while still showing every candidate’s profile/submission.

Version 2

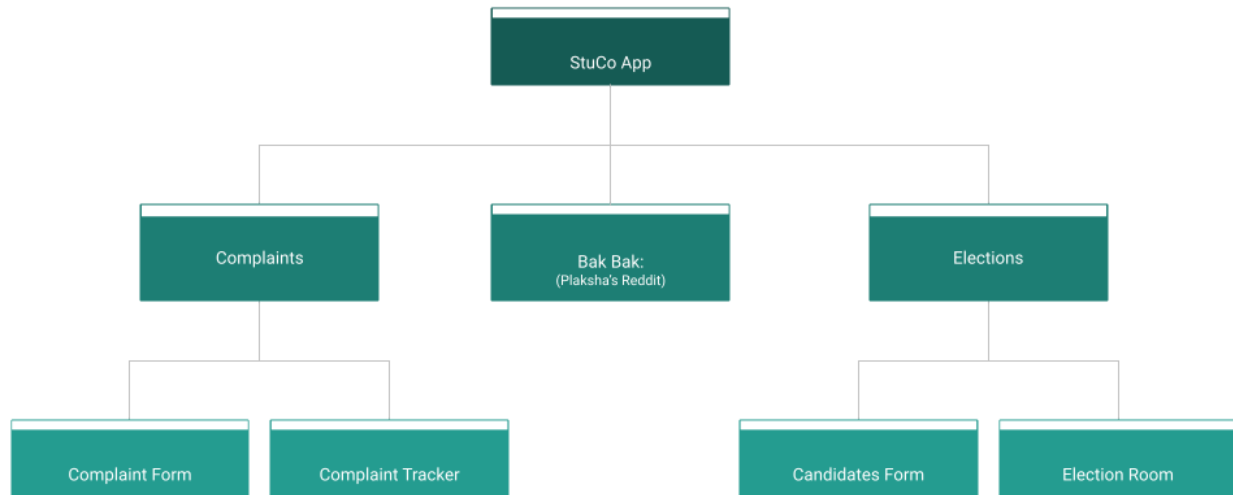
Methodology and process

Based on the user feedback from version 1 and our tests, three main things stood out that needed changing. First was the overall theme of the application. Since this is a plaksha-specific application, it should follow the themes and design choices of plaksha to maintain consistency. The second main change is the change in aesthetics ranging from repositioning the objects to reducing and cutting unnecessary text. The last significant change was including proper navigation and adding more pages to better depict the app's workflows. Overall we finalized the basic structure and workflows of the application.

- Overall: We first changed the black and white theme to a white and teal theme of plaksha. We added the option of going back to the home page by clicking on the plaksha logo as it fits in with the existing mental model of using the logo to navigate to the home page like in the case of youtube. Finally, we introduced sectioning on the landing page and repositioned the elements to make it easy for the users to focus.
- Grievances: We introduced a toggle button for the anonymous option, which disables the name and email fields in the form when selected. We introduced a grievance tracker that will show the current status of the complaint filed, including the comments from relevant authorities. The grievance tracker also included a follow-up button that enables the student to send an email to appropriate authorities if they are not satisfied with the resolution of the problem at any stage.



- Elections: We changed the text-heavy election room to a more minimal format with a top navigation bar to select candidates based on different roles. We added ballot pages to depict the voting workflow.



(Version 2: All page structures were locked in, 21/09/2022)

User Test and Feedback:

Our main criteria for choosing users this time was diversity. So we selected three TLP students, three from undergraduate program year one and three from undergraduate program year two, and Professor Hangal. Below are the main points of feedback (Full feedback in [Appendix](#)).

Workflow	Feedback	Learning
Overall	<ul style="list-style-type: none"> > “Make the announcements tab on the landing page smaller” > “Add icons for different workflows on the landing page” > Students were instinctively clicking on the back button to go back. > “I want an option to navigate different pages from any page.” > “Add a photo gallery so we can view the activities happening in plaksha” 	<ul style="list-style-type: none"> > Need to provide a universal navigation option for the user on every page. > Need to change the layout of the elements, with the announcements tab made smaller and placed on the left. > Add a filter button to the announcement tab, as many announcements will pile up, making it easy for the user to search for a particular topic.

	<ul style="list-style-type: none"> > A calendar with student council activities displayed. > “I want to filter the announcements to see what I want.” > “I want to see the contact information of student council members.” > Students instinctively clicked on the announcements tab, but we did not link it to anything else. 	<ul style="list-style-type: none"> > Need to increase the visibility of student council activities by adding a gallery, contact information of student council members, and upcoming events.
Grievance	<ul style="list-style-type: none"> > “Why should I write my name, email, and batch in the grievance form since I already logged in to SharePoint?” > “My problem requires an urgent solution, but I can’t find whom to contact.” > “If I visit the grievance tracker when my grievance reaches the review stage or any stage after that, then why am I unable to see my problem description?” > “The name grievance sounds very negative. Maybe change it to something else?” 	<ul style="list-style-type: none"> > Need to add Microinteractions like autofill > Need to add visibility of system status like showing the problem description at every stage of grievance tracker. > Need to add a home page with important contact information and major complaints that other people have. > Need to change the name “Grievance” to “Complaints” as it sounds more agreeable.
Student Forum	<ul style="list-style-type: none"> > “How can I search for a particular topic?” > “I am lost after coming here since the page is a bit messy and unstructured” > “How can I like a specific post?” 	<ul style="list-style-type: none"> > Need to rethink the design of the student forum as the users were not connecting with it. > Need to add a search bar to find any post. > Need to give users a way to react to the posts other than just commenting, like giving them an option to like the posts.
Elections	<ul style="list-style-type: none"> > Change the name ‘Candidates room’ to ‘Election room.’ 	<ul style="list-style-type: none"> > Need to name things more intuitively. For example, candidates

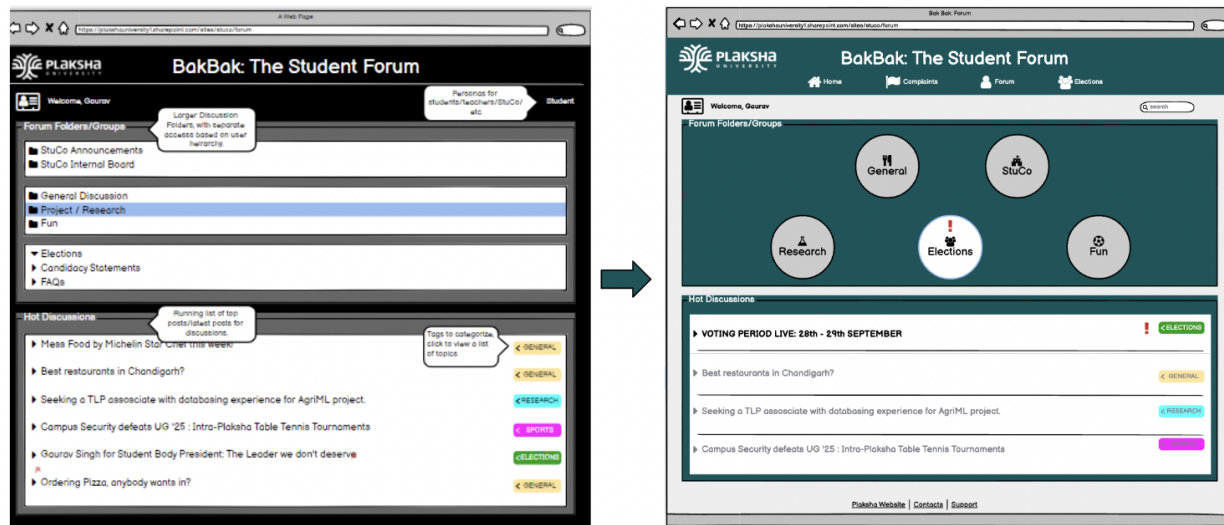
		can be generic, but this is specific to the election.
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Version 3

Methodology and process

Based on the extensive feedback on Version 2, we had our work cut out for version 3. The significant changes included being conscious of mobile-friendly design: this change cascaded into some restructuring across the app. Additionally, this version needed to be more student-friendly, and as a result, we removed a lot of boxy elements and introduced a gallery.

- Overall: The most noticeable overall feedback came on navigation. Users wanted the ability to navigate between pages, and thus we introduced a navigation bar on the top of all pages, except when voting was in progress. We even made other minor changes following the feedback given.
- ~~Grievance~~ Complaints: We reworded the larger name across the flow to 'Complaints.' We created a main page aggregating all other complaints where students can like and upvote. This page also contains relevant contact information. On the tracker, we enabled the users to contact the respective stakeholder to 'Follow Up.'
- Forum: We converted the folders from traditional line formats to circles and made them more visible. Additionally, we removed the subfolders from the main page and created their own pages with subfolders and posts under them. Finally, we reduced the number of posts and introduced a red exclamation mark highlighting important posts.
- Elections: We introduced a back button to enable users to navigate back and forth (President, VP, etc.) while voting. Additionally, we introduced a thank you page when the users submitted their votes.



(Version 3: The Student Forum redesign, 27/09/2022)

User Test and Feedback

Feedback for Version 3 was limited and came via a review by one TLP student and a class presentation for the prototype.

Workflow	Feedback	Learning
Overall	> The page structure works, but margins could be better used. More whitespace would look more minimal.	
Complaints	> There could be a backend visualizing complaints, categories, etc. > "Can Guest users be accommodated into this feature?"	> Need an 'Admin' end of the portal for Student Life to view data on the complaints. > Need to be conscious about the types of users who can use each feature.
Student Forum	> Forums are hard to redesign, but the circle folders were much more aesthetic.	-
Elections	> Flow not shown to users	-



Conclusion

After eleven user tests, three iterations, and a presentation, the summed-up learnings from this project were immense. At every step, we were truly humbled by our fellow students (and the Professor), some of the best users we could find, who pointed out problems that, in retrospect, should have been obvious. For example, a simple navigation bar did not occur to us until we saw about half our users struggle without it. We owe all our user testers the utmost gratitude.

The biggest learnings we had as we iterated focused on showing users consistent system status, be it with a tracker on complaints, a ‘thankyou’ screen on candidacy submission, or a confirmation page on voting. Users responded the most positively to these features, and we think such features are a must now to keep users engaged and feeling like the system is interacting with them.

Another big set of design considerations we learned (the hard way) was about balancing the need for a minimal look and feel with functionality, especially once we needed to consider building for mobile. For example, between landing page iterations, we saw how users would focus too much on an oversized announcements block on the right and how that attention shifted to our main complaints/forum/elections functionalities by reducing words and repositioning the elements. We think we could still minimize the prototype substantially in further iterations.

Finally, we learned a lot about balancing user freedom with preventing error/abuse. This was especially salient given that our user testers were highly explorative in their testing. For example, we implemented a global navigation system in the app but then realized that voting users shouldn’t be leaving the page (that could cascade into many issues) and thus removed the features for those pages. Our expert user taught us about how auto-filling submission forms based on user accounts could save a few seconds each time, and additional users pointed us towards how a simple ‘filter’ on announcements could personalize that feed for what users would like.

How would we take this forward?

Apart from introducing changes based on the version 3 feedback (Guest persona, admin views for complaints, etc.), we would strive for a more minimal landing page with an even more student-friendly look and feel. Taking this prototype to the real world, we would look to integrate it with the upcoming University Management System being built by our fellow students.

Team

Aditya Pandey

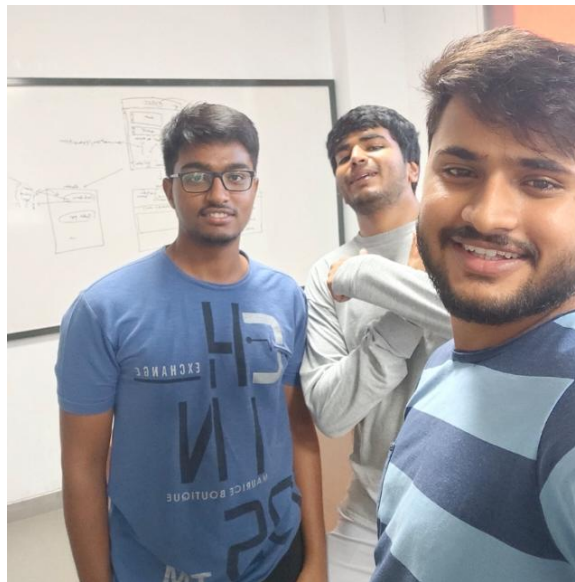
Understanding the users and problem statement, wireframing the prototype, user testing, Ideation, and report-making expert.

Gaurav Singh

Understanding the users and problem statement, wireframing the prototype, user testing, and design choice expert.

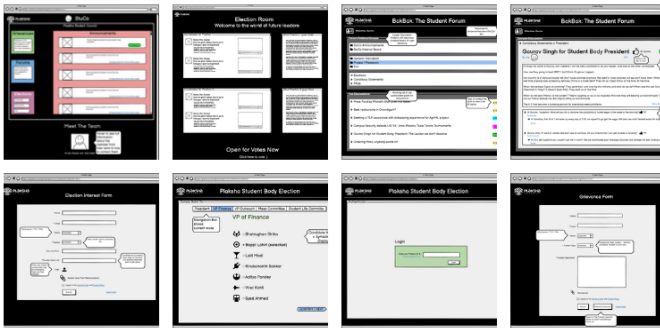
Kirubananth Sankar

Understanding the users and problem statement, wireframing the prototype, user testing and making changes based on feedback, and proofreading.

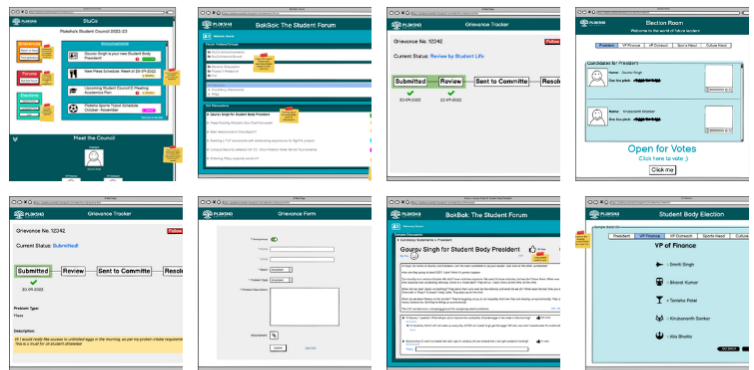


(Team: Kirubananth, Aditya, Gaurav (Left to Right))

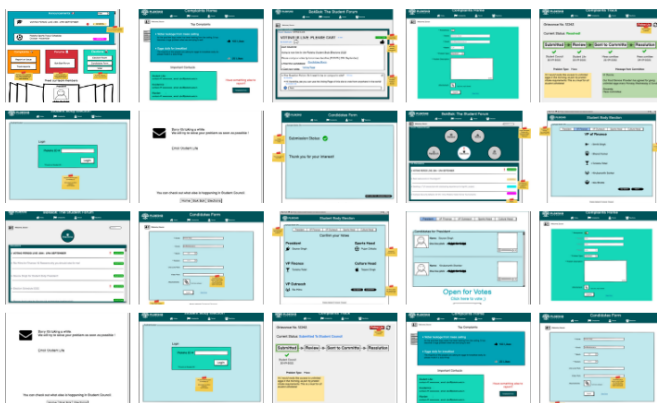
Gallery



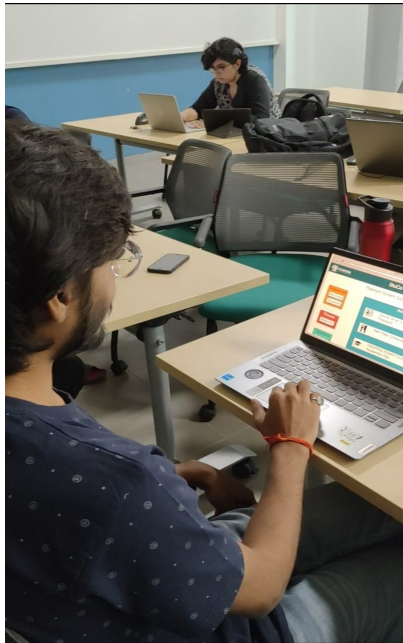
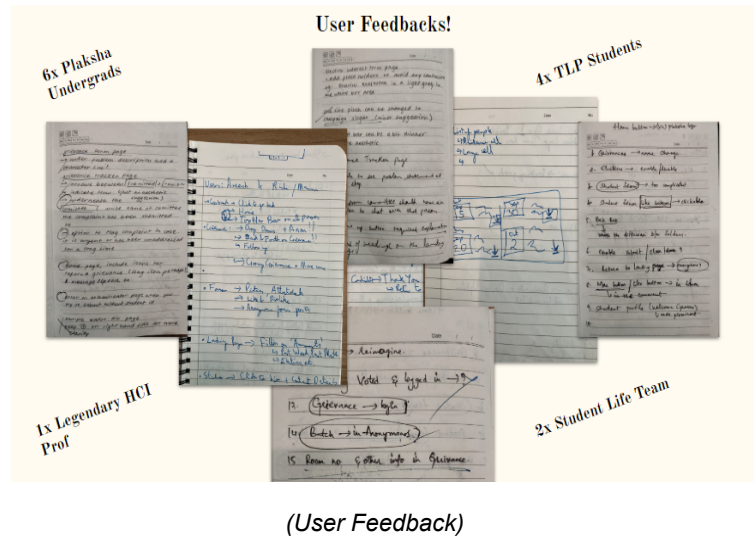
We started from here



A major milestone



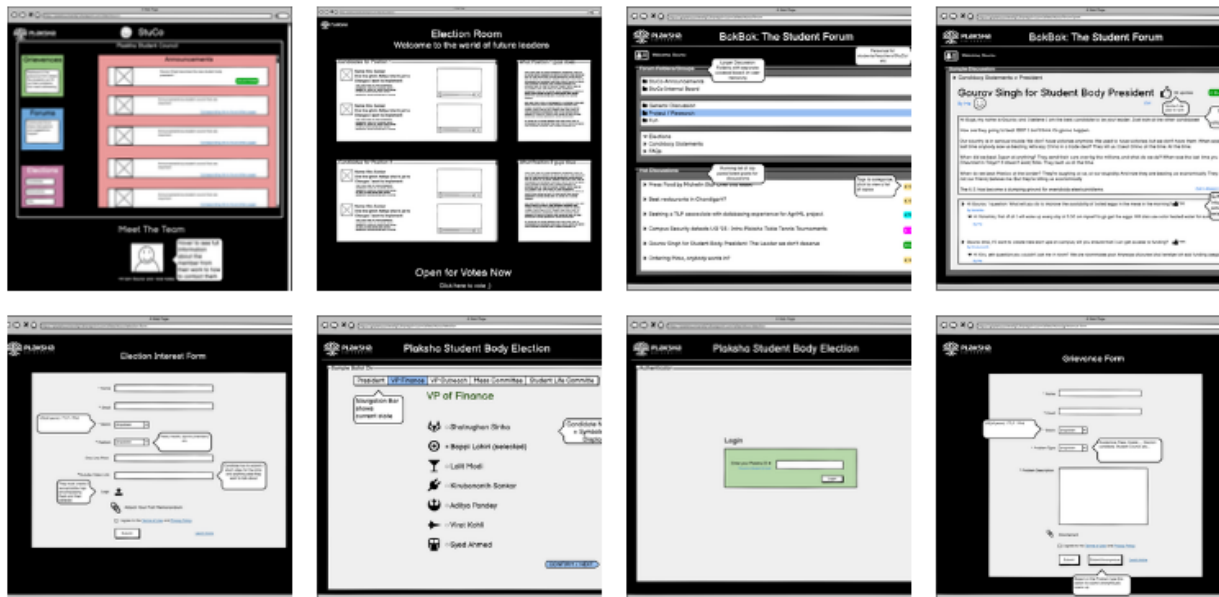
Finally we reached here



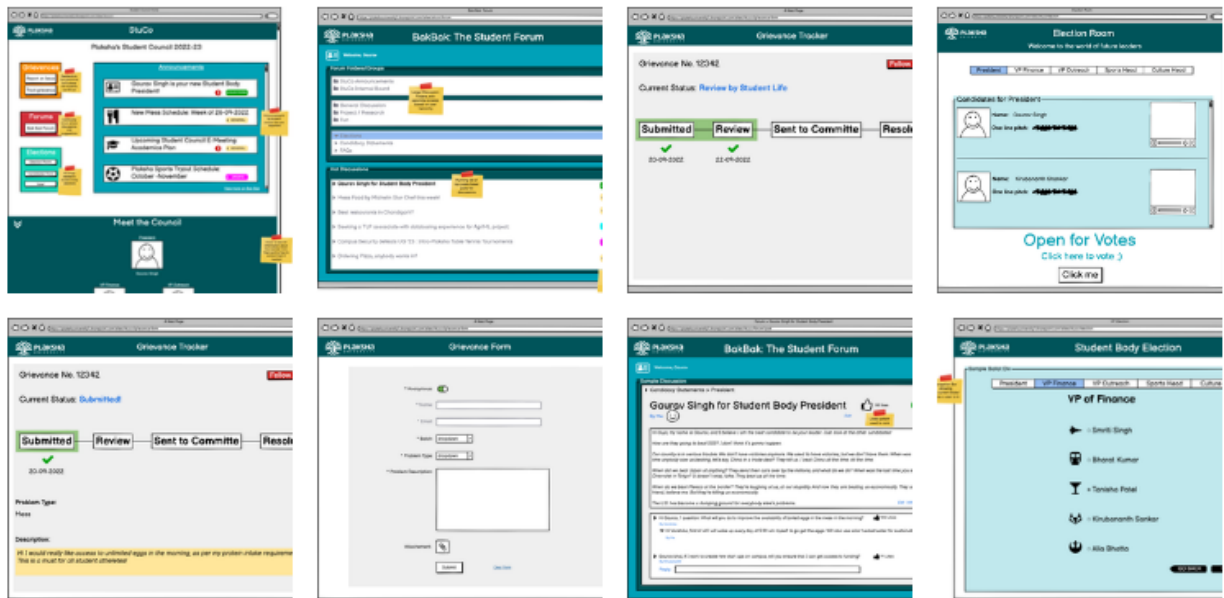
(User Test 2 underway, 22/09)

Appendix

Version 1: <https://balsamiq.cloud/stiyej/p43pf3p>



Version 2: <https://balsamiq.cloud/stiyej/pq449kq>



Version 3: <https://balsamiq.cloud/stiyej/pdrgprp>



User Feedback Table (Implemented feedback in bold):

Users: 4x TLP Students, 6x Undergraduate Students, 2x Student Life Team Members, 1x HCI Professor

Sectors	Feedback
1) Landing Page	<p><u>Layout:</u></p> <p>-Announcements on Left, Flows on Right.</p> <p>?Icons for Grievances, Forums, Selections.</p> <p>-Back Button</p> <p>+Calendar for student council events.</p> <p>+Photo Gallery</p> <p>+Universal Navigation Bar on Every Page</p> <p>- Change the font size of announcements</p>



	<u>Announcements:</u> -Remove general random posts. -Make full announcement white bar clickable. -Text Color for Important -Filter Button by past week, past month.
	<u>Grievances:</u> -Reword to Complaints.
	<u>Stuco:</u> -Hover to show bio + contact -Instead of Hover, Box widget with picture and detail.
2) Grievance	<u>Grievance Form:</u> -Word Limit -AutoFill the Form based on user details <i>-Problem Type Hierarchy</i> -Anonymous disables batch -Attachments should show allowed file formats (pdf, docx, mp3)
	<u>Top Section of Grievance Form:</u> -Phone Number section for Warden number, security, etc. -Recent Top Grievances: -Likable, etc. -”Is your grievance one of these”
	<u>Grievance Tracker:</u> -Show initial problem at every step -Follow Up => Back and forth live conversation window, user can input stuff.



	<p><i>-Flag Complaint: Just activates a flag that sends a reminder/increases importance.</i></p> <p>-Name of Committee the Grievance has been submitted to.</p>
	<u>Grievance Follow Up Screen</u>
3) Forum	<p><u>Forum Home:</u></p> <p>-Search Button</p> <p>-Reduce Number of Folders (Too Complex</p> <p>-Pictures and Attachments.</p> <p>-Click to go to Post</p>
	<p><u>Forum Post:</u></p> <p>-Anonymous Post</p> <p>-Pictures and Attachments</p> <p>-Too much text in Post.</p> <p>-Reply should be consistent.</p> <p>-How to Like? Like should be clear.</p>
	<u>+Theme page:</u>
4) Elections	<p>Candidates Page:</p> <p>-Youtube Link <> Video Pitch</p> <p>-File Formats for attachments (pdf, doc)</p>
	<u>+Thank you</u> after submitting Candidate Form:
	<p><u>Voting:</u></p> <p>-Back Button for user to go back to previous ballot</p>

