Student Gymkhana Automation Committee

Preliminary Report

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Task: To decide the possible fields in which automation is needed in Gymkhana services and then suggest a possible plan to carry it on.

Proposal: The committee has decided that Students' Gymkhana needs automation in certain sectors which are now based on physical signature and proposes to change these to digital signature. Also, the committee analyzed ways in which the Students' Gymkhana can serve the campus better using online facilities and proposes formulation of some new services. Finally, the committee proposes the priority order in which these sectors have to be dealt with and the action plan for the same.

PRIORITY-WISE DEVELOPMENT SECTORS

1. **Finance:**
   a. **Budget Planning:**
      i. Categorization of the Budget into the different segments: Councils, Clubs, Senators which is dynamically updated as and when the expenditure is done. The planning of overall budget controlled by the Finance Convener and the General Secretaries at the council level. The expenditure of the councils also showing the SSF used.
      ii. Timeline Management option for the respective Councils and Senators where they can propose a tentative expenditure structure vs. time. Not a compulsory feature.
   b. **Forms:**
      i. Clearance of various forms which need the physical signature of the authorities at multiple levels be done using digital signature. Automatic update of respective budget and expenditure pages. Archive maintained.
      ii. Authentication module for all those who control the expenses. The authenticated users will get option for digital signature and their accounts will be dynamically updates.
   c. **Bill Clearance:**
      i. Bill Clearance system cannot be automated because bills need to be verified physically. But the bills can be uploaded online for archiving and transfer to future authorities.
      ii. Stock management and inventory management be automated.
2. **Permissions:**
   a. **Letter Forwarding:**
      i. Various letters which pass through the executives and then through the institute authorities just for signature be automated.
      ii. A system of uploading PDFs on the pages of the executives where they digitally sign them and then forward to the authorities for e-signature.
      iii. Once electronically signed, the permissions be sent back to the requester directly through the system.
   b. **Permission for using Institute Facilities:**
      i. Forms for using various institute facilities like the LHC, Auditorium etc. be made digital.

ii. System to be followed will be the same as forwarding of letters with electronic signatures at multiple levels.

3. **Online Booking:**
   a. **Gymkhana Facilities:**
      i. Portal for the online booking of various facilities that come directly under the Students' Gymkhana like the New SAC rooms, OAT Stage etc.
      ii. Payment of fees through the system discussed elsewhere.
   b. **Equipment Use:**
      i. Portal for the management and issuing of different equipment that are owned by the different councils.
      ii. Payment of fees through the system discussed elsewhere.

4. **Online Payment Option:**
   a. **Fine Collection:**
      i. Portal for the collection of Gymkhana dues and fines.
      ii. Automatic generation of receipts with e-signatures and archive of the receipts.
   b. **Online Payment Portal:**
      i. Portal that is linked with the booking system of different facilities.
      ii. Automatic generation of receipts with e-signatures and archive of the receipts.
   c. **Merchandise Sale:**
      i. Portal for sale of the different memorabilia and items that the Gymkhana councils and clubs release throughout the year.
      ii. Automatic generation of receipts with e-signatures and archive of the receipts.

5. **Mail Groups and Forums:**
   a. **Subscription Mailing Lists:**
      i. The system of group mails be changed. Instead of mailing the entire community all students be provided option to subscribe to the lists where mails of their interests are circulated.
      ii. Large number of options be provided and the process to add oneself to the list be easy.
      iii. Mails to all be sent only in case of emergency.
   b. **Nominations:**
      i. Working on the ideas of Subscription Lists, the nomination lists be created. People interested in selected avenues shall subscribe to specific nomination lists.
      ii. Nomination pages be created where nominations for different avenues are present and links to the same are also present for easy browsing.
   c. **Discussion Forums:**
      i. Forums for discussion of different aspects, opportunities and difficulties of student life.
      ii. Forums for different councils of the Gymkhana for easy feedback system and suggestions.
   d. **Bulk SMS:**
      i. A future investment which will allow the Gymkhana to maintain an easy contact with the entire student community in face of emergency.
      ii. Not for general use.
   e. **News Feeds:**
      i. Just like subscription mailing lists, divided news feeds be also created wherein the different kinds of information floating through mail are available at a single destination.

6. **Event Manager:**
   a. **Calendar:**
      i. A consolidated calendar containing dates for all student activities conducted under the umbrella of the Students' Gymkhana.
      ii. Options to add new events after confirmation by a moderator.

        iii. Links to different events can be added for easy navigation and more information about particular events.

  b. Personalized Calendar:
        i. Numerous sub-calendars be made available by the different councils and clubs.
        ii. Option for the public to subscribe the calendar interested in.

  c. Alerts:
        i. Option to add your e-mail id to any event in the calendar and get regular updates.
        ii. Options to create customized alert pattern.

  d. Ticket Booking:
        i. For events where a limited public can be accommodated, option for including the ticket booking on the module.
        ii. If the tickets are paid then option to use the online payment portal.

7. General Championship:

  a. Event Descriptions:
        i. The description about the complete GC and different events under it.
        ii. Links to different events where detailed descriptions, rules and judging is present.
        iii. Consolidated feed of news about the GC.

  b. Point-Tally:
        i. Public display of point-tally of GC at all times.
        ii. Links to point tallies of different events available.

  c. Registration:
        i. For the events with no personalized website, the links to register for the events, if needed, be given here.
        ii. For the events with personalized website, redirecting links given.

  d. Entry Submission:
        i. For the events with no personalized website, the links to portals for submission of entries be given here.
        ii. For the events with personalized website, redirecting links given.

  e. GRC Complaints:
        i. Portal for filing GRC complaints available subject to acceptance of the GRC complaints at the time.
        ii. The GRC complaints during each event be made public with the outcome.

8. Senate Website:

  a. Personal Pages:
        i. Pages for all Senators and Executives where their manifestos are uploaded and proposals shared.
        ii. Updates of all agendas filed by a senator or executive.
        iii. Dynamic update of action taken on the senator's agenda.
        iv. Option to file an agenda with the senator after authentication through CC-id.

  b. Category Pages:
        i. Pages for different batches where the manifestos of all their senators are uploaded and proposals shared.
        ii. Updates of all agendas related to the batch with the report of action taken.
        iii. Option to file an agenda with the senators after authentication through CC-id.

  c. Committee Pages:
        i. Pages for different committees of the students' senate with the members as the moderators.
        ii. Updates of all agendas of the committee and action taken report present.
        iii. Suggestion Section included.

d. **Online Streaming:**
      i. If hardware installed, then online streaming of Senate meetings.
9. **Social Media:**
   a. **Online Streaming:**
      i. With the help of FMC, online streaming of various events and happenings in the campus.
      ii. Archiving of event videos.
   b. **Social Connect:**
      i. Management of different social avenues of different councils through a team of moderators and managers.
10. **Complaint Management:**
    a. **Councils:**
       i. A council-wise complaint management system that efficiently works as proxy for every council's mail account.
       ii. Administrator rights to the executives when managing these complaints.
    b. **General Complaints:**
       i. General complaint management system that is managed by all the executives together.
11. **Mobile App:**
    a. **Versatile Profile:**
       i. Encompassing all the automation related development.
    b. **Social Connect:**
       i. Up gradation of present social connect and news feed system.
    c. **Event Reminders:**
       i. Good alert system for event reminders or invitations.
    d. **Subscription:**
       i. Good integration of subscription list.

ACTION PLAN

1. **Student Automation Committee**
   a. **Restructuring:**
      i. The committee be restructured with inclusion of more experienced members and possible exclusion of members not interested anymore.
   b. **Information collection:**
      i. Information collection and analysis be the preliminary work of the committee.
   c. **Model making:**
      i. Based on the collected information models be made and approval be got from the respective authority before commencing of work.
   d. **Supervising Development:**
      i. Models be provided to the respective developers and their future work be supervised.
2. **Institute Automation Department:**
   a. **Digital Signature:**
      i. Use their experience in changing the institute approval system from physical signature to digital signature wherever needed.
      ii. Ask them to build a system centered on a group of moderators preferably the executives.
   b. **Mailing List:**
      i. Use the institute system of making the course-based mailing list in making of the subscription list.
      ii. Ask them to build a dynamic mailing list system centered on the executives.

3. **Student Developers:**
   a. **Front-end:**
      i. The main work of the student developers be to provide front-end website development support to Institute Automation Department.
   b. **Back-end:**
      i. For development where Institute doesn't provide back-end support extra back-end developers be taken into the team.