

N-Sync

Project Documentation

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Objective

NSync aims to revolutionize college event management and student engagement by providing a unified digital platform. The platform facilitates seamless event organization by faculty, enables students to stay informed about campus activities, and provides an integrated system for joining clubs and accessing college news. The goal is to enhance communication, participation, and collaboration within the college community.

Existing System

In the current system:

- Event management is mostly manual and scattered, often relying on physical notices, email chains, or word-of-mouth communication.
- Students face difficulties in staying updated about upcoming events or announcements.
- Club activities are not centrally managed, making it challenging for students to discover and join clubs.
- Communication gaps exist between faculty and students regarding campus activities.

This fragmented approach often leads to lower participation, missed announcements, and inefficiencies in organizing and managing events.

Proposed System

The proposed system, **NSync**, addresses the challenges of the existing system by introducing:

- A centralized **Event Management** system where faculty can create, manage, and track events.
- A **College News Section** to provide students with timely updates about campus announcements and achievements.
- A **Club Management** module that allows students to explore and join clubs effortlessly.

- **Real-Time Notifications** to ensure students and faculty stay informed about important updates.
- An intuitive **User Dashboard** for students to track their participation and for faculty to oversee events and club activities.

The system, developed using Flutter, ensures cross-platform compatibility, offering both web and mobile application interfaces.

Features

1. Event Management

- Faculty can create and manage events with details like date, time, venue, and registration.
- Students can register for events and receive reminders.
- Attendance tracking for event participants.

2. College News Section

- A centralized hub for announcements, updates, and achievements.
- Segmented categories (academic, cultural, sports, etc.) for better organization.
- Search and filter options.

3. Club Management

- Directory of all active clubs with descriptions and activities.
- Easy club membership management for students.
- Club-specific events and activity tracking.

4. Real-Time Notifications

- Alerts for event updates, news, and deadlines.
- Push notifications to ensure users don't miss important information.

5. User Profiles

- Personalized dashboards for students to track participation and club memberships.
- Faculty dashboards for event and club oversight.

NSync - Table Design

1. tbl_department

Primary Key: department_id

Foreign Key: NIL

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	department_id	INT	PRIMARY	Unique ID of Department
2	department_name	VARCHAR	NOT NULL	Name of Department

2. tbl_faculty

Primary Key: faculty_id

Foreign Key: department_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	faculty_id	INT	PRIMARY	Unique ID of Faculty
2	faculty_name	VARCHAR	NOT NULL	Name of faculty
3	faculty_email	VARCHAR	NOT NULL	E-mail of Faculty
4	faculty_password	VARCHAR	NOT NULL	Password of Faculty
5	faculty_contact	INT	NOT NULL	Contact of Faculty
6	faculty_photo	VARCHAR	NOT NULL	Photo of Faculty
7	faculty_designation	VARCHAR	NOT NULL	Designation of Faculty
8	department_id	INT	FOREIGN	Unique ID of Department

3. tbl_assign

Primary Key: assign_id

Foreign Key: faculty_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	assign_id	INT	PRIMARY	Unique ID for Assign
2	faculty_id	INT	FOREIGN	Unique ID of Faculty
3	academic_year	INT	NOT NULL	Academic Year

4. tbl_student

Primary Key: student_id

Foreign Key: department_id, academic_year

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	student_id	INT	PRIMARY	Unique ID of Student
2	student_name	VARCHAR	NOT NULL	Name of Student
3	student_email	VARCHAR	NOT NULL	E-mail of Student
4	student_password	VARCHAR	NOT NULL	Password of Student
5	student_photo	VARCHAR	NOT NULL	Photo of Student
6	student_status	VARCHAR	NOT NULL	Status of Student
7	student_admno	INT	NOT NULL	Admission Number of Student
8	student_contact	INT	NOT NULL	Contact of Student
9	department_id	INT	FOREIGN	Unique ID of Department
10	academic_year	INT	FOREIGN	Academic Year

5. tbl_club

Primary Key: club_id

Foreign Key: faculty_id, student_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	club_id	INT	PRIMARY	Unique ID of Club
2	club_name	VARCHAR	NOT NULL	Name of Club
3	faculty_id	INT	FOREIGN	Unique ID of Faculty
4	student_id	INT	FOREIGN	Unique ID of Student

6. tbl_members

Primary Key: member_id

Foreign Key: club_id, student_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	member_id	INT	PRIMARY	Unique ID of Member
2	club_id	INT	FOREIGN	Unique ID of Club
3	student_id	INT	FOREIGN	Unique ID of Student
4	member_status	VARCHAR	NOT NULL	Member Status

7. tbl_participants

Primary Key: participant_id

Foreign Key: student_id, event_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	participant_id	INT	PRIMARY	Unique ID of Participant
2	participant_status	VARCHAR	NOT NULL	Participant Status
3	student_id	INT	FOREIGN	Unique ID of Student
4	event_id	INT	FOREIGN	Unique ID of Event

8. tbl_event

Primary Key: event_id

Foreign Key: club_id, department_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	event_id	INT	PRIMARY	Unique ID of Event
2	event_name	VARCHAR	NOT NULL	Name of Event
3	event_details	VARCHAR	NOT NULL	Details of Event
4	event_fordate	DATE	NOT NULL	For Date of Event
5	event_lastdate	DATE	NOT NULL	Last Date for Event
6	event_participants	INT	NOT NULL	Number of Event Participants
7	event_status	VARCHAR	NOT NULL	Status of Event
8	event_venue	VARCHAR	NOT NULL	Venue of Event
9	club_id	INT	FOREIGN	Unique ID of Club
10	department_id	INT	FOREIGN	Unique ID of Department
11	event_poster	VARCHAR	NOT NULL	Event poster

9. tbl_newsletter

Primary Key: newsletter_id

Foreign Key: NIL

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	newsletter_id	INT	PRIMARY	Unique ID of News Letter
2	newsletter_title	VARCHAR	NOT NULL	Title of News Letter
3	newsletter_content	VARCHAR	NOT NULL	Content of News Letter
4	newsletter_image	VARCHAR	NOT NULL	Image for News Letter

10. tbl_complaint

Primary Key: complaint_id

Foreign Key: user_id

SL NO	NAME	DATA TYPE	CONSTRAINTS	DESCRIPTION
1	complaint_id	INT	PRIMARY	Unique ID of Complaint
2	complaint_title	VARCHAR	NOT NULL	Title of Complaint
3	complaint_content	VARCHAR	NOT NULL	Content of Complaint
4	complaint_screenshot	VARCHAR	NOT NULL	Image of Complaint
5	complaint_date	DATE	NOT NULL	Date of Complaint
6	complaint_reply	VARCHAR	NOT NULL	Reply to Complaint
7	complaint_status	VARCHAR	NOT NULL	Status of Complaint
8	user_id	INT	FOREIGN	Unique ID of User