

# Mobile app for NYIT Students

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**Abstract**— The era of mobile technology opens the windows to the Android and IOS app. The websites are vanishing and the mobile phones are emerging. It's the time to change from conventional websites to apps, which has become the part of our daily routine. We are introducing my.NYIT the android application software. The my.NYIT app is Sleek, distinctive, clean User Interface app enlightens user to view all your academics information just where you want it when you want. The my.NYIT app provides user to view course details, venue information, time-table, faculty venue information and the free slots of every faculty along with the other information being displayed, quiz dates, college history, departments, workshops, major events conducted on campus, and virtually everything deftly organized at one place. An essential apparatus for every NYIT Student. Individual account can be created for students. It provides a college identity by Student ID, Password and access to financial aid through barcode. Various club and organizations can invite or publicize through flyers for their events. Latest news and updates about college is got through notifications. Validation of the app will be done through Students Survey.

**IndexTerms**—Android Studio, Firebase, Barcode Authentication, Java, Security

## I. INTRODUCTION

The era of mobile technology opens the windows to the Android and IOS app. The websites are vanishing and the mobile phones are emerging. The NYIT mobile application is a part of a broader initiative to take the conventional website to the mobile devices. The app provide access to many essential NYIT information services anytime, anywhere on your mobile devices. The application is design to keep track of all academic on your mobile devices. It's the time to change from conventional websites to apps, which has become the part of our daily routine. We are introducing my.NYIT the android application software. The my.NYIT app is Sleek, distinctive, clean User Interface app enlightens user to view all your academics information just where you want it when you want. This app is useful for users like parents, faculties and student either from New York Institute of Technology or applicant. This app gives the total solution to everyone. The my.NYIT app is Sleek, distinctive, clean User Interface app enlightens user to view all your academics information just where you want it when you want. The my.NYIT app provides user to view course details, venue information, time-table, faculty venue information and the free slots of every faculty along with the other information being displayed, quiz dates, college history, departments, workshops, major events conducted on campus, and virtually everything deftly organized at one place. An essential apparatus for every NYIT Student. Individual account can be created for students. It provides a college

identity by Student ID, Password and access to financial aid through barcode. Various club and organizations can invite or publicize through flyers for their events. Latest news and updates about college is got through notifications.

## II. DETAILED DESIGN

The application is divided into various modules. They are:-

### A) Authentication

Authentication will give user a secure and comfort screen to login. The password and username will be with the administrator use only and is not accessible to any other than the college administrator. Any Student who does not belongs to NYIT cannot login and hamper the system. The login page consist of two basic fields, Username and Password. A message will be displayed if the user put wrong password. There is a button Login for submitting the entered username and password. On successful entry the user will be provided with the administrator control page to control all the settings of the database and on unsuccessful login the user is directed again to the same login page with an error message. The basic functional requirement of the login page is that it will only be access by the student of the NYIT. Any other person can only access of the information like about the college, process for the admission. The function of the login page is the user will submit the username and password and then the details will go to administrator control.

### B) Time Table

The student can access their timetable with ease and check your next class, and the day's schedule.

### C) Faculty Info

Many times student get lost in the school building trying to look for the faculty's cabin. NYIT Faculty Info displays the name, cabin and email details of each and every faculty in NYIT according to their respective divisions or schools.

### D) NYIT Campus Tour

A location-based Campus map will highlight important landmarks on campus and will allow you to easily find your way around. As you approach buildings our app will provide you with important information regarding our programs.

### E) Transfer Credit Evaluation

NYIT offers a generous transfer credit acceptance policy, including not only college courses taken at comparable institutions, but also prior learning and life experience, and advanced placement and college courses taken while in high school. Upon enrollment, our Transfer Evaluations department will review your transcripts and prepare a personalized, course-by-course evaluation of credits applicable to your major.

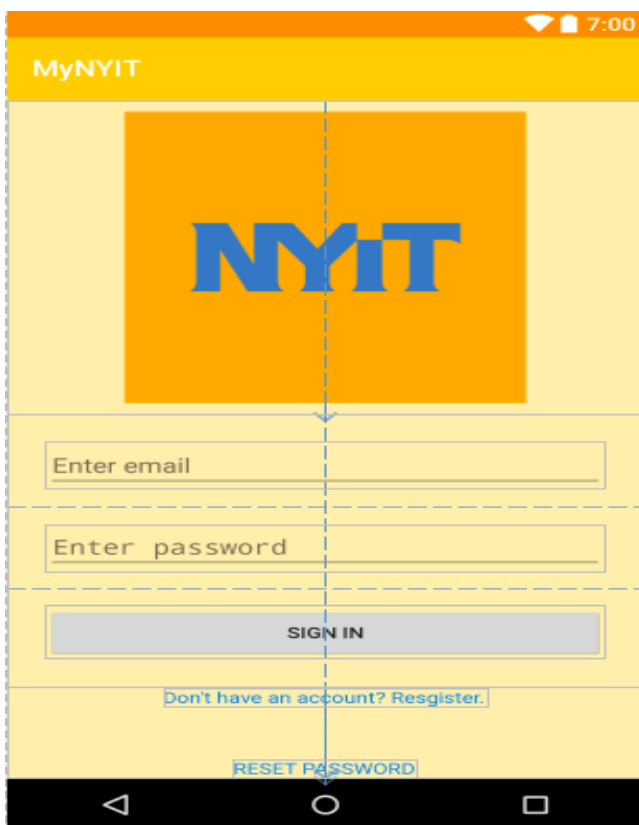


Figure 1. Login Page

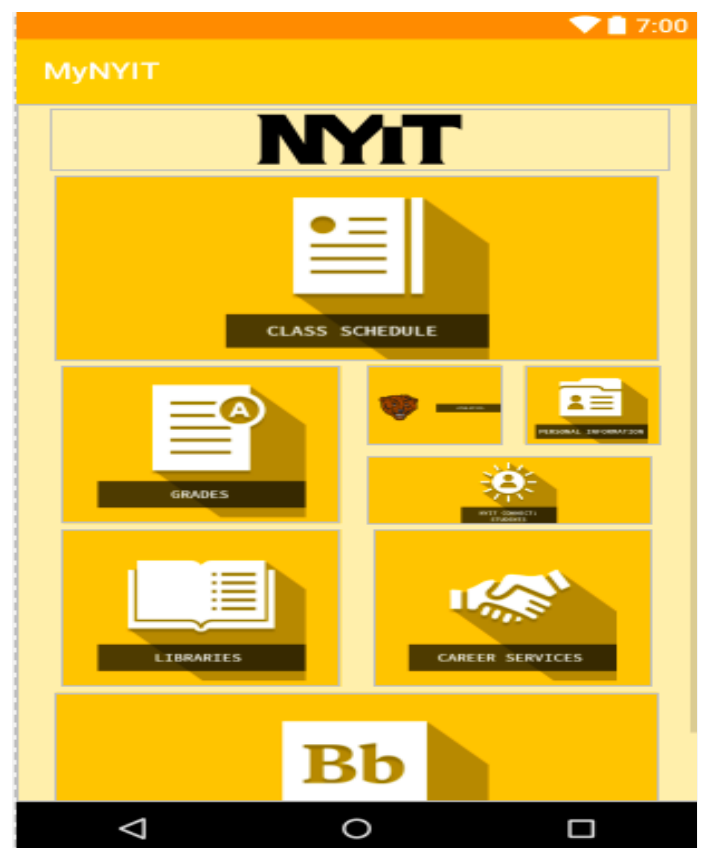


Fig 2. Home Screen

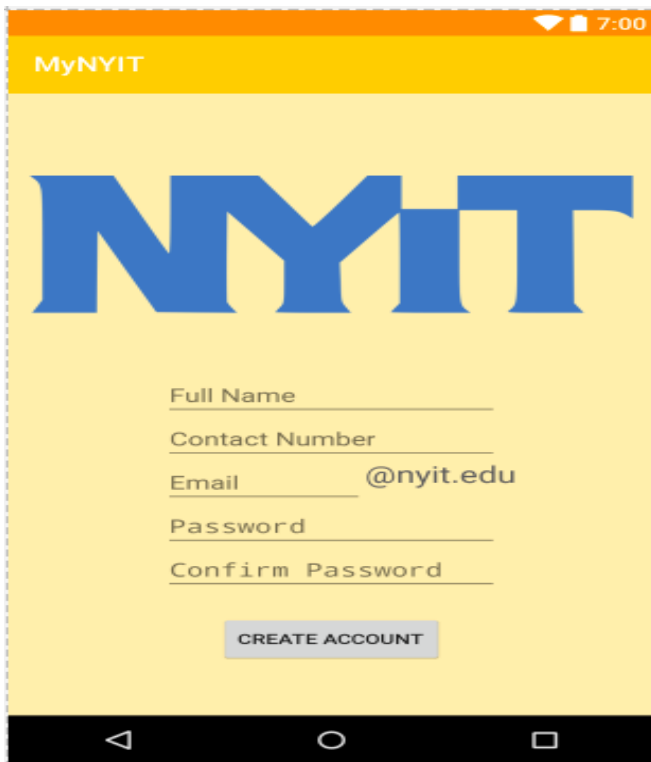


Fig 3. Create Account

### III. LITERATURE SURVEY

#### 1. Harvard University Mobile App

The Harvard Mobile app is a University-wide initiative to improve the mobile experience of students, faculty, staff, visitors, and neighbors who interact with Harvard's campus and community. Released in January 2013, Harvard Mobile 2.0 is the latest version of the application with a number of functional, design, and content enhancements. Harvard Mobile 2.0 now has native applications for Android and IOS operating systems, as well as a mobile web application accessible to any web-enabled Smartphone. In the Harvard Mobile 2.0, the features of Harvard University are divided into different modules such as PEOPLE, ADMISSIONS, COURSES, MAPS, SHUTTLE TRACKER, DINING, ATHLETICS, LIBRARY, NEWS, EVENTS, MULTIMEDIA, PHOTOS, SOCIAL, SHARE, ALERTS, HARVARD CAMPAIGN. In these modules, it provides information about faculty, university map to guide for location directions, admission information and application requirements, courses for different department, dining services, intra and inter-school transportation schedule, sports information, events schedule, extra curriculum events and schedule, university photographs, student portal for fee and class registration, chatting, emergency information and contacts as well as articles. This is the integrated mobile app which is user friendly and also gives platform for people to connect to the university. The drawbacks of this app that when a tourist who wanted to check

out Harvard, this app has no information for the same. This app crashes all the time and News and updates just comes up like a flashlight in front of the eyes, anytime anywhere.



Fig 4. Harvard Home page

#### 2. Amity University

Amity University is one of the most hi-tech Universities in the world now launches its New App with additional features. Now Prospective parents and Students can get Information about Amity University and Programs offered, take Amity Online career test, download amity application form and prospectus, and more on Android devices. Amizone (Amity Intranet Zone), the Intranet Portal is at fingertips on Android Devices for Current Amity Students and parents. The Amity mobile apps provided different features in mobile application. It includes ADMISSIONS in which it allows us to download Application Form and provide Offline forms for sales centers as well as guidelines for Admission Prospectus, Scholarships, and Education Loans. Also app includes icon for PROGRAMS which is offered by university. The icons like CAREER TEST, NEWS AND EVENTS, MAPS AND DIRECTIONS FOR AMITY CAMPUSES, DIRECTORY gives all the campus and faculty information according to user requirements. The information and background for Amity University such as Why Amity, features like Government Recognized, World Class Infrastructure, Reputed Faculty, Research Focus, Ranked Top, 100% Placements, Corporate Interaction is provided in ABOUT university link. Amity Mobile have the student portal named AMIZONE which has TIMETABLE (Get easy access to your daily class schedule and details on the faculty and location of the class), COURSES AND SESSION PLAN (See your subjects and

session plans), ATTENDANCE (Access your latest attendance status of all subjects), EXAM ADMIT CARDS AND RESULTS (Get your exam results with Marks, Grades, SGPA and CGPA. Also fill your exam admit card.), SUGGESTION BOX ( Post your suggestions and complaints and see the status of the suggestions/complaints posted by you) , NEWS AND EVENTS ( Read the latest on Amity University and Find out what's going on at Amity) , LIVE AND RECORDED VIDEOS OF LECTURES AND EVENTS ( Watch live videos of events and lectures. View recorded lectures at your convenience.), FACULTY (See your Faculty and post messages to them) , ONLINE JOURNALS ( Access thousands of online journals ) , FEES (See your Fee invoices and the payments made by you), DIRECTORY ( Get easy access to online directory of important numbers of Amity University like Administration, Amity clinic, Hospitals, Hostel Warden etc..) , POLLS AND QUIZZES (Participate in opinion Polls and Quizzes.) , NOTICE BOARD ( Read the latest and important notices for you). The drawbacks of this app is it loads the data very slowly and sometime it gets slow. Also It UI is not user friendly and the app keeps on crashing.



Fig 5. .Amity Home page

### 3. New Jersey Institute of Technology (NYIT GO)

The official mobile app of New Jersey Institute of Technology that is NYIT GO has a quick and easy access to faculty, staff and students directory, campus info, maps, news, events, and more. NYIT GO is tabular representation of the university data and platform for students and faculty to access university details and individual information regarding university. The app provides access to school email data through WEBMAIL tab in which user can see the mail and it is connected to student id so that it automatically gets sign in to school mail account after login to the app. The app has administrative information such as helpful contacts, academic calendar, events schedule, direction information, and catering deals under NUMBERS, DIRECTORY, CALENDAR, EVENTS, MAPS, and DINING tabs. It also has STUDENT PROFILE tab under which student can add their details, edit/update information such as contact details, address etc. In the NYIT GO, under ACADEMICS, it has registration and Class list tab which includes student registration process and classes information according to registration. In COURSES tab, it gives different course information and details regarding it. And it also has tab for sports and athletes i.e VECTOR. The app also gives information about student organization, club, groups and extra curriculum. The additional feature of this app is, it provided tab for transportation service in the nearby location that is public transport through NJ TRANSIT tab. Also it has informational tab for shuttle schedule and parking availability in campus, it is dynamic page which changes daily. The drawbacks of this app is no guest have access to this app for the campus details and directly details.

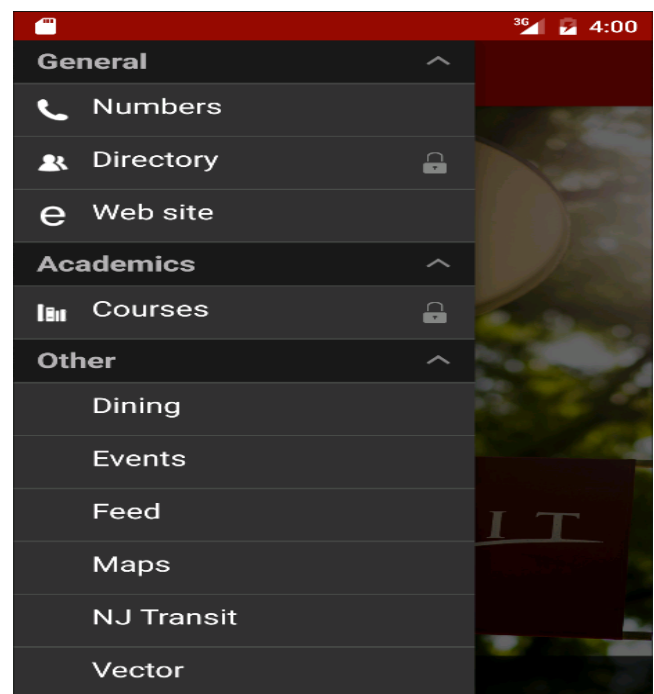


Fig 6. NJIT Home page



#### 4. New York University

The latest update of New York University mobile app provides students with instant access to key information essential to their day-to-day lives at New York University. NYU MOBILE Version 3.0 is the latest version of the app which has number of features like:

- a) Push Notifications
- b) Dining menus across NYU's New York City campus
- c) All Gender Restroom locations on NYC campus added to Maps feature
- d) One-click access to our most popular features, including Safe Ride and NYU Shuttle
- e) Bookmarking feature for NYU News and NYU Events
- f) Job postings on Career Net
- g) NYU Classes on-the-go (read-only).

NYU Mobile allows you to: Search for jobs on CareerNet, Search the campus map, Check bus routes, Find contact information in the NYU Directory, Check the University events calendar, Browse University news. Schedule Safe Ride transportation, Receive University Info Alerts, including push notifications, dining services information for meal plans, details etc. student/faculty portal for class assignments, academic document, and grades i.e. NYU CLASSES Provides portal for student administrative information, class registration process, fee information, course details with class schedule, student loan information in ALBERT NYU GUIDE app is a sub app of NYU MOBILE which is made for extra curriculum activity such as events, news, and campus life for student, Student social life. The drawbacks of this app is that We can able to log into Classes without being able to access uploaded PDF and Word documents from professors. Also Dining is practical, but bogged down by slow loading times.



Fig 6. NYU Home page

NYU Classes is the same story, but its navigation is also impractical, including fall terms a user wasn't enrolled for and excluding old spring terms. Another problem with this app is that the primary function in the NYU website is the NYU classes, which is included in NYU mobile fortunately.

Yet the resource tab is missing. Resource tab contains almost all the assignments, datasets and reading materials related to the course. Without a resource tab, the NYU classes is almost useless.

#### 5. Rutgers, The State University of New Jersey

Rutgers mobile app access the University on the go button which checks campus bus times, dining hall menus, myRutgers, and more. Rutgers mobile app uses Material Design, a new layout, and updated UI throughout. It has all campus information integrated in the app. The app consists of several tab including BUS, MYRUTGERS, SAKAI,FOOD, SCHEDULE OF CLASSES, LIBRARIES, PLACES, EMERGENCY SERVICES, NB RESIDENCE LIFE, EVENTS, NB STUDENTS AFFAIRES, NEWS, NB KIOSK, NB CAREER SERVICES, RU-INFO, R-ALUMNI, FEEDBACK etc.

The features of Rutgers Mobile app are as follows:

In FOOD, it has categories of canteen according to location. Under that, it has food menu, information about different canteens and services and also address for each canteen location. In BUSES, it is provides information about transportation service and shuttle information with timings in the campus as well as in the surrounding area. myRutgers' is the student/faculty portal for academic purpose for class registration, admission, fee portal, scholarships, course details, admission details etc. LIBRARIES tab provide the information about book storage, study rooms, print and fax details etc. In SCHEDULE OF CLASS, we will get information for class schedule and timing, assignments, grades, exam details etc. PLACES tab is like the map browser which helps to search the place in the campus, location track etc. Emergency Services provides necessary information and contacts as well as emergency alerts among campus and small guide for action plans for emergency. In NB RESIDENCE LIFE, it provides information for campus as well as off campus housing, guide for new students and campus tour. EVENTS tab provide event details schedule and location for events conducted in campus. In NB STUDENTS AFFAIRES, the orientation information, student's association information and contact details for students heads for particular department. NEWS tab includes all campus news including student's affairs, sports news, important events, meetings, festivals information, collage news etc. NB KIOSK is a page where we get all information about visitor center, location information, dining and lodging, entertainment & athletics,

maps, parking, special events etc In NB CAREER SERVICES, the information about campus jobs, internships, campus drive, student guideline center, important dates for job fairs etc. RU-INFO is the informative page includes all information of university, campus area, admission process, student intake information, departments etc. R-ALUMNI is past student connectivity and related events. FEEDBACK is a page for all for suggestion. The drawbacks of this app that Not User Friendly .It asks right away which campus you are going to, then 98% of the information is still for New Brunswick with the other 2% for Newark. Also they don't provide any useful feedback to the user, they aren't in line with the material design language, and they're buggy (when switching views sometimes the old one gets stuck). Another problem with this app is can't view/download PDFs from Assignment 2 pages on Sakai. Sakai also has many bugs with the GUI.

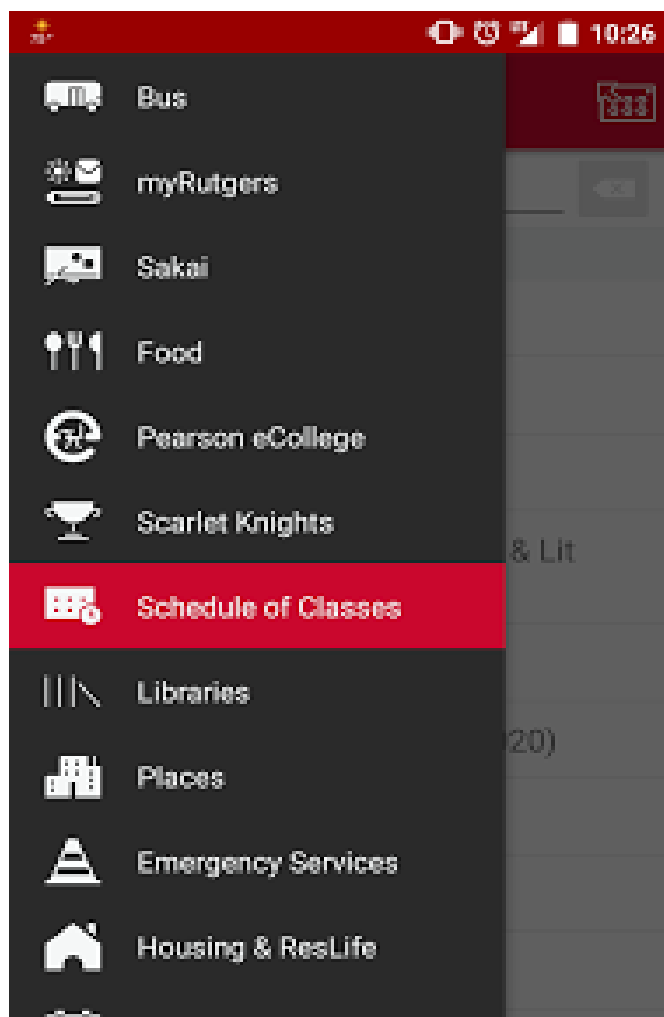


Fig 6. Rutgers Home page

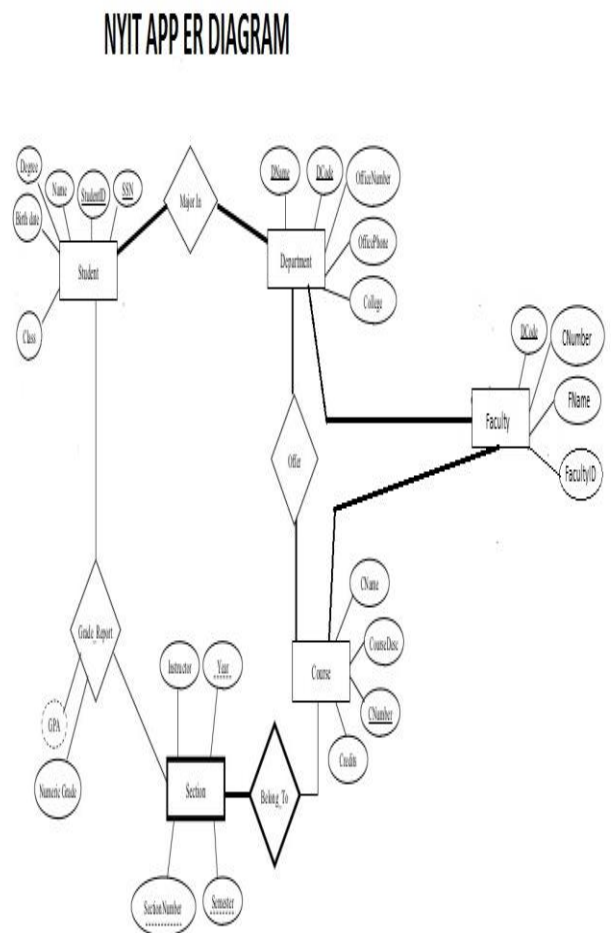
#### IV. EXISTING SYSTEM

The college information and notifications are currently viewed through only official website. It is difficult to check the notifications through mobile phones and the notifications can only get by accessing the website. Authors and Affiliations

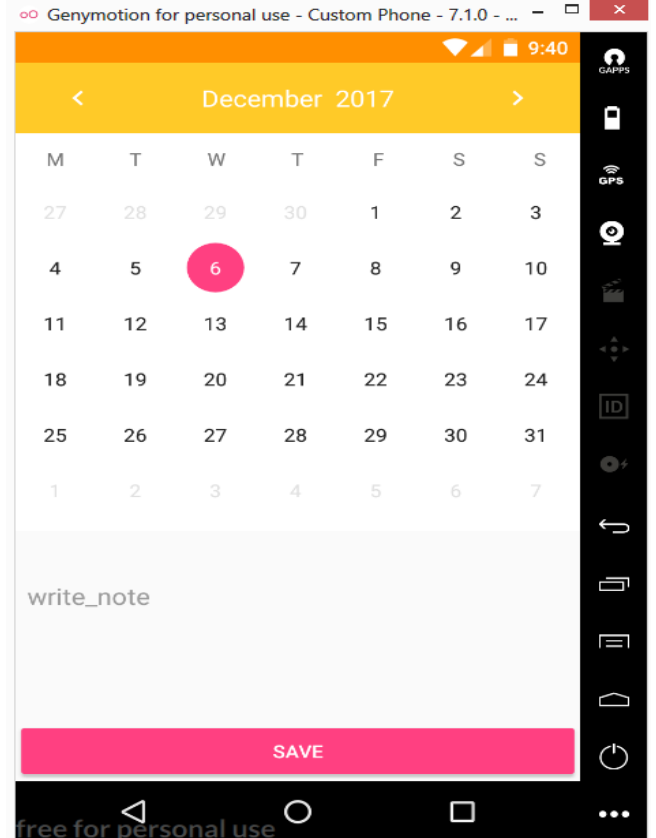
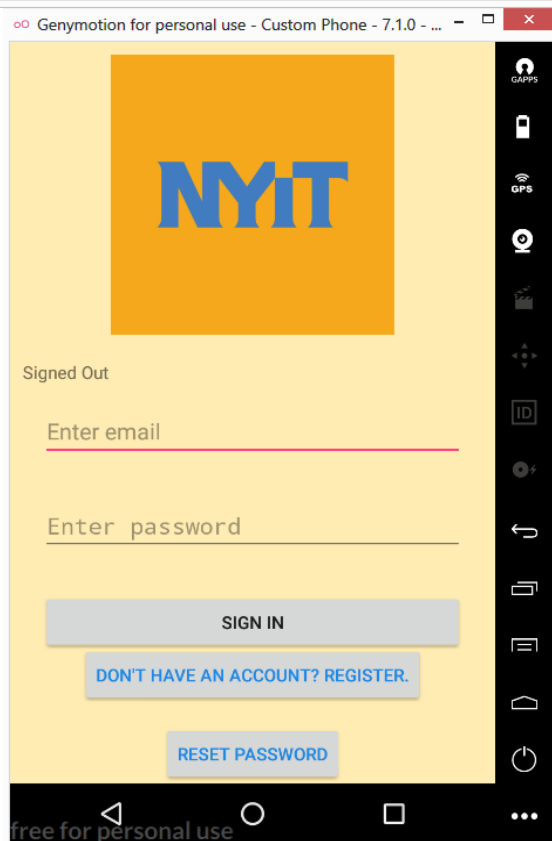
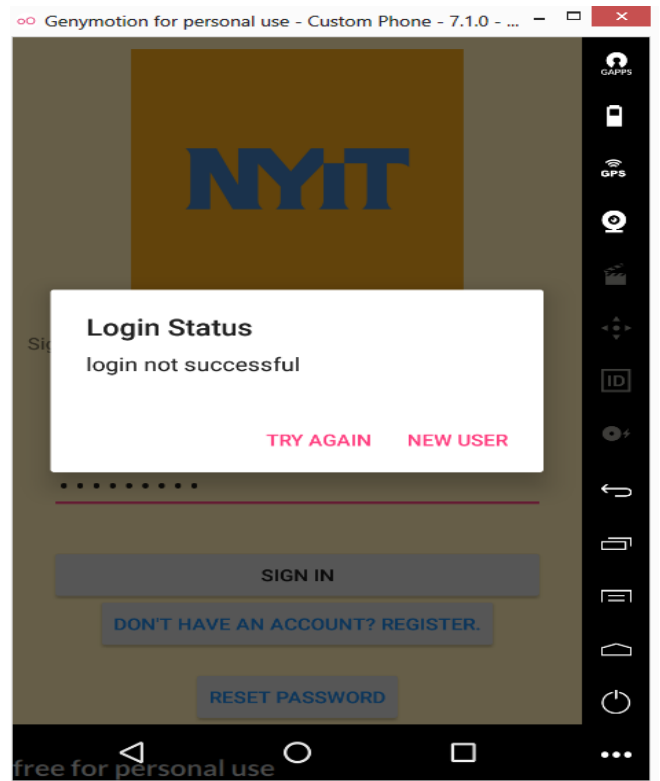
#### V. PROPOSED SYSTEM

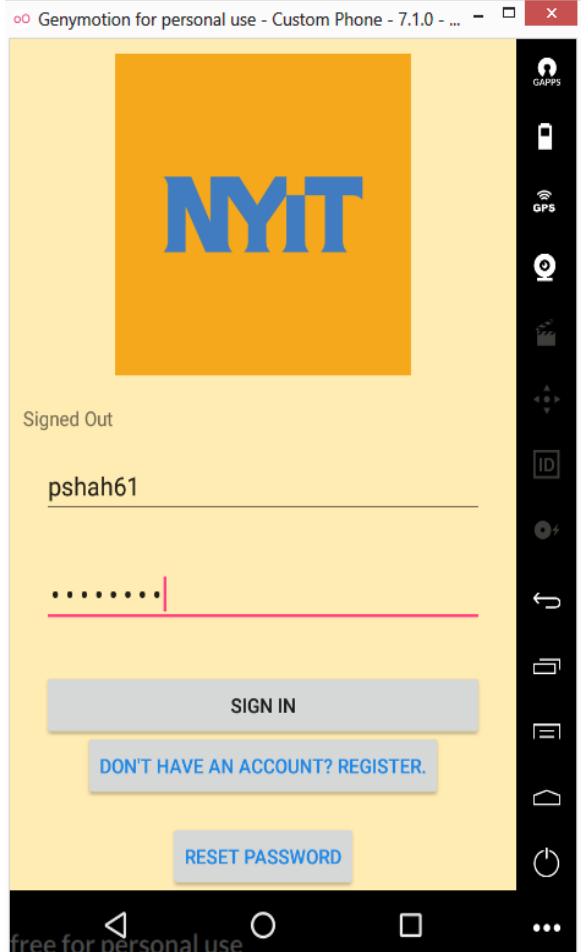
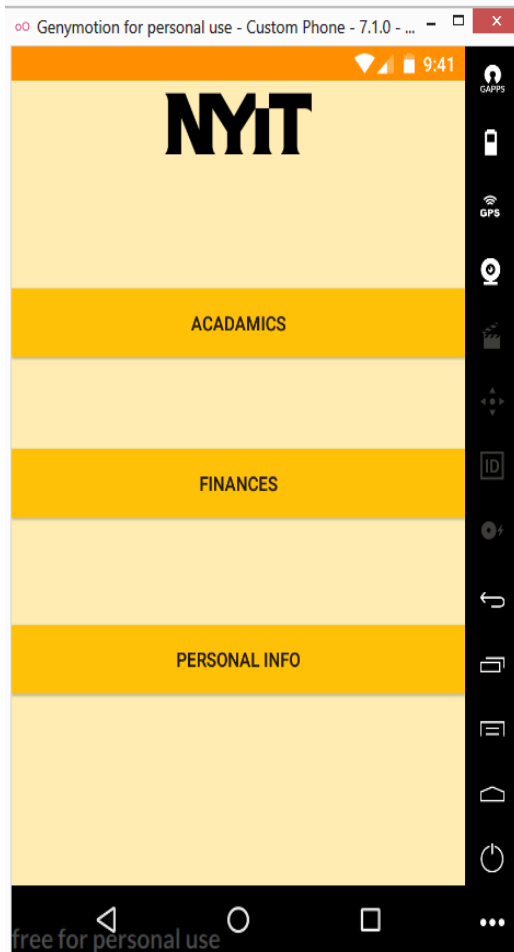
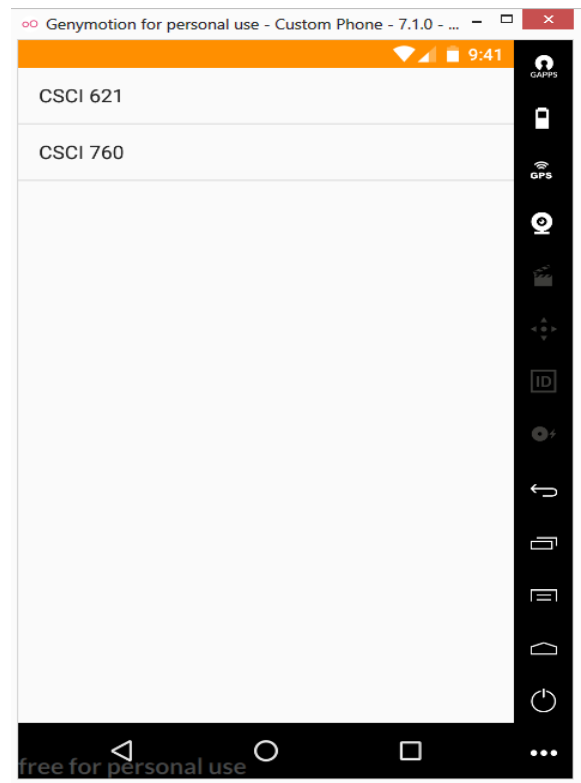
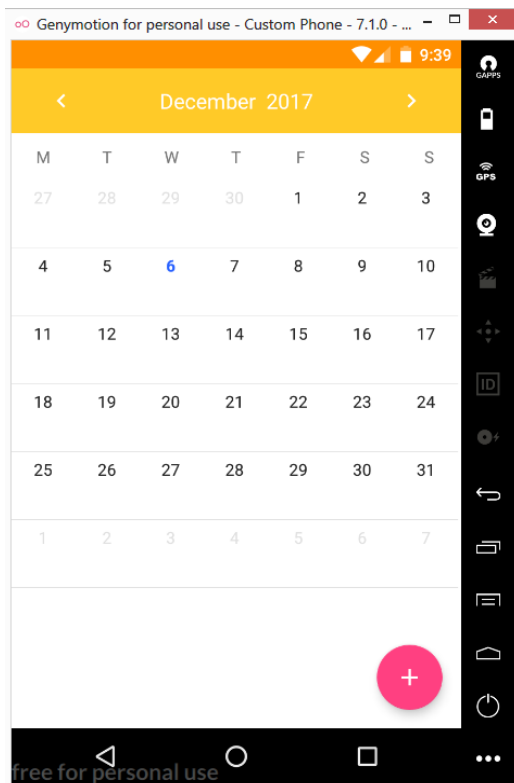
We are introducing my.NYIT the android application software. The my.NYIT app is Sleek, distinctive, clean User Interface app enlightens user to view all your academics information just where you want it when you want. This app is useful for users like parents, faculties and student either from New York Institute of Technology or applicant. This app gives the total solution to everyone.

#### VI. PROJECT ER DIAGRAM



## VII. PROJECT IMPLEMENTATION







## VIII. CONCLUSION

The era of mobile technology opens the windows to the android app. The websites are vanishing and the smart phones are emerging .It is time to change from conventional websites to apps which has become the part of our daily routine. We are introducing my.NYIT the android application software which the app version of our University Website.

## IX. FUTURE SCOPE

Currently the Android application works as an offline application which only allows access data from the application .Future the application will be working as online application which includes the features like bus tracking system, which allows the parents to track the bus and this feature is very helpful as it emphasis on security . The registered NYIT Students user would be provided a chat on facility for communication. Application also integrate advanced students teachers communication for better utilization of the application .Parents, teachers communication may also be developed. Attendance percentage calculator can be introduced. Assignments can be submitted through online, and mailed etc. .Online Library system can be introduced

## X. ACKNOWLEDGMENT

I take this opportunity to express my profound gratitude and deep regards to **my guide Dr. Wenjia Li (Assistant Professor, CSE dept., NYIT)** for his exemplary guidance, monitoring and constant encouragement throughout the course of this project. The blessing, help and guidance given by him time to time shall carry me a long way in the journey of life on which I am about to embark.

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