- **Team**
  1. Anirudh Tiwari
  2. Daniel Milroy
  3. Sneha Parmar
  4. Saurabh Sood

- **Title:** NextBox

- **Project Summary:** NextBox is a cloud based application on the lines of Dropbox, which allows users to manage their files, and share it with others. The system allows the users to manipulate and share files and directories.

- **Project Requirements:**

  1. User Requirements

ID	Actor	Requirement	Priority
UR 01	User	View home directory and navigate filesystem	Critical
UR 02	User	Must be able to create account	Critical
UR 03	User	Change directory structure (creating, deleting, moving, renaming directories)	Critical
UR 04	User	Copy, paste, delete, rename files	Critical
UR 05	User	Upload files	Critical
UR 06	User	Download files	High
UR 07	User	View and edit text file	High
UR 08	User	View photos	High
UR 09	User	Search for file or directory	Medium
UR 10	User	View usage	High
UR 11	User	Change plan	Medium
UR 12	User	Share file with another user	Medium
UR 13	User	View and pay bill	Medium
UR 14	User	Add a credit card	Medium
UR 15	Admin	Create users	High

UR 16	Admin	Change the activation status	Critical
UR 17	Admin	Modify Plan	Low
UR 18	Admin	Create a plan (change per month rate and space)	Low

2. Business Requirements

ID	Actor	Description	Priority
BR1	Billing System	Update bill monthly based on usage	Medium
BR2	Billing System	Warn and do not allow the user in case they exceed the usage	Medium

3. Non-Functional Requirements

ID	Actor	Description	Priority
NFR1	System	Prohibit escalation of privilege	Critical
NFR2	System	Support at least 100 user accounts	Medium
NFR3	System	Support at least 4 concurrect directory listings/FS tree walks	High
NFR4	System	Run on HTTPS	Nice to Have

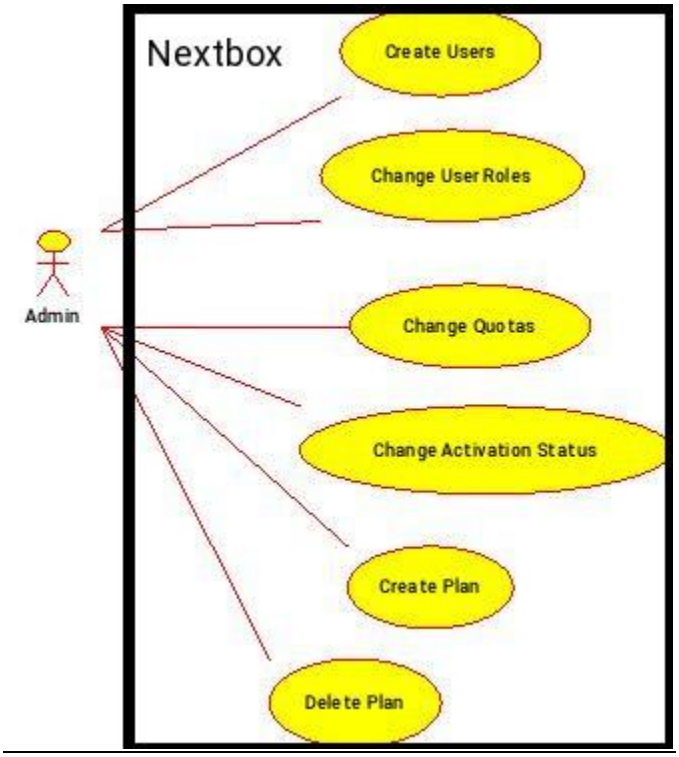
- **Use Cases**
  1. Use Case Document

Use Case ID	Actor	Description	Responsible
UC 01	User	Create an account	Anirudh
UC 02	User	Add credit card	Anirudh
UC 03	User	Rename file	Anirudh

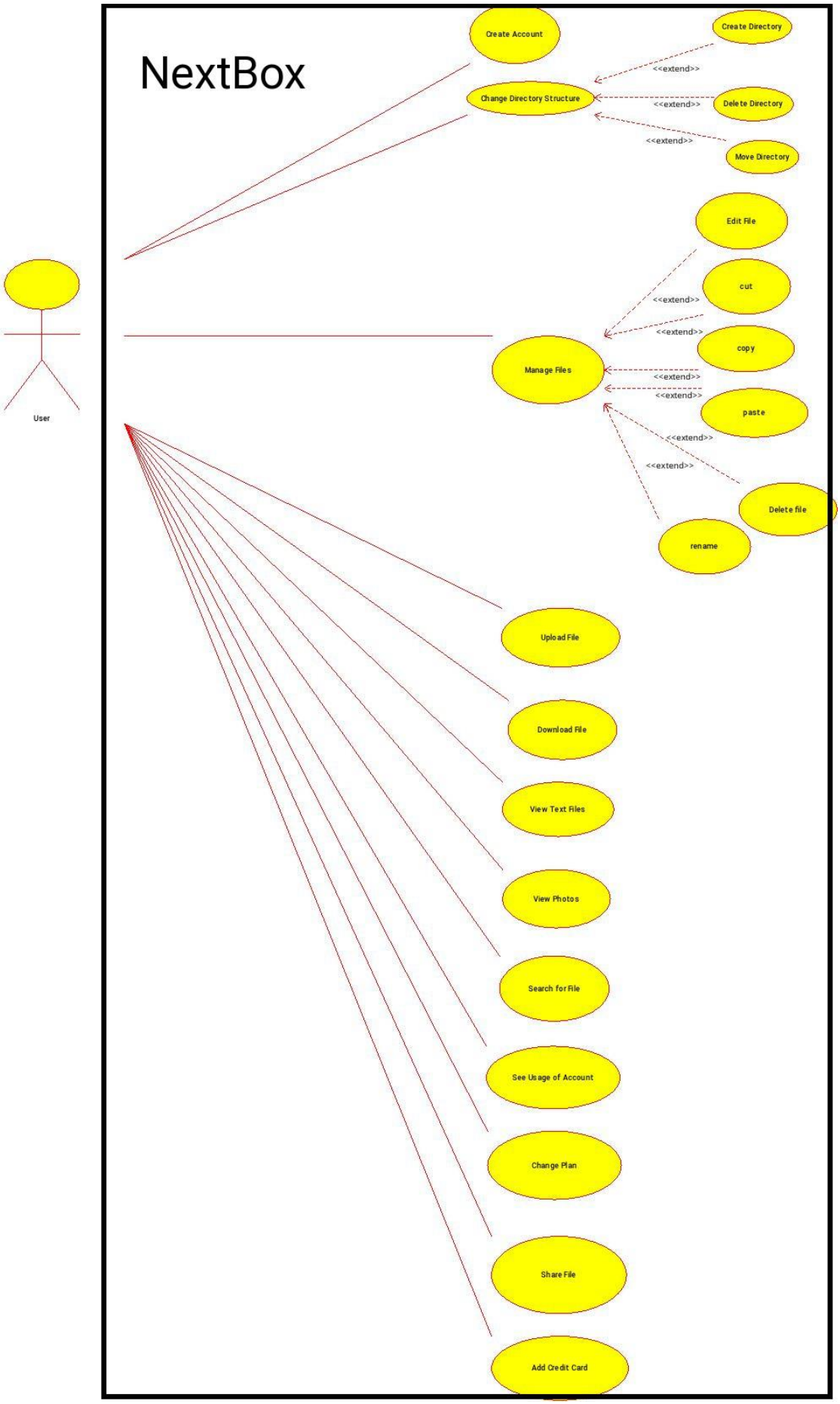
UC 04	User	Delete file	Anirudh
UC 05	User	Copy file	Anirudh
UC 06	User	Paste file	Anirudh
UC 07	User	Create directory	Dan
UC 08	User	Delete directory	Dan
UC 09	User	Move directory	Dan
UC 10	User	Rename directory	Dan
UC 11	User	Upload file	Saurabh
UC 12	User	Download files	Sneha
UC 13	User	View text file	Sneha
UC 14	User	View photo	Dan
UC 15	User	Search for file or directory	Sneha
UC 16	User	See account usage	Sneha
UC 17	User	Change plan	Dan
UC 18	User	Share file	Saurabh
UC 19	User	Check bill	Saurabh
UC 20	Admin	Create user	Dan
UC 21	Admin	Change activation status	Sneha
UC 22	Admin	Create plan	Saurabh
UC 23	Admin	Modify plan	Saurabh
UC 24	User	Edit text file	Sneha

2. Use Case Diagram

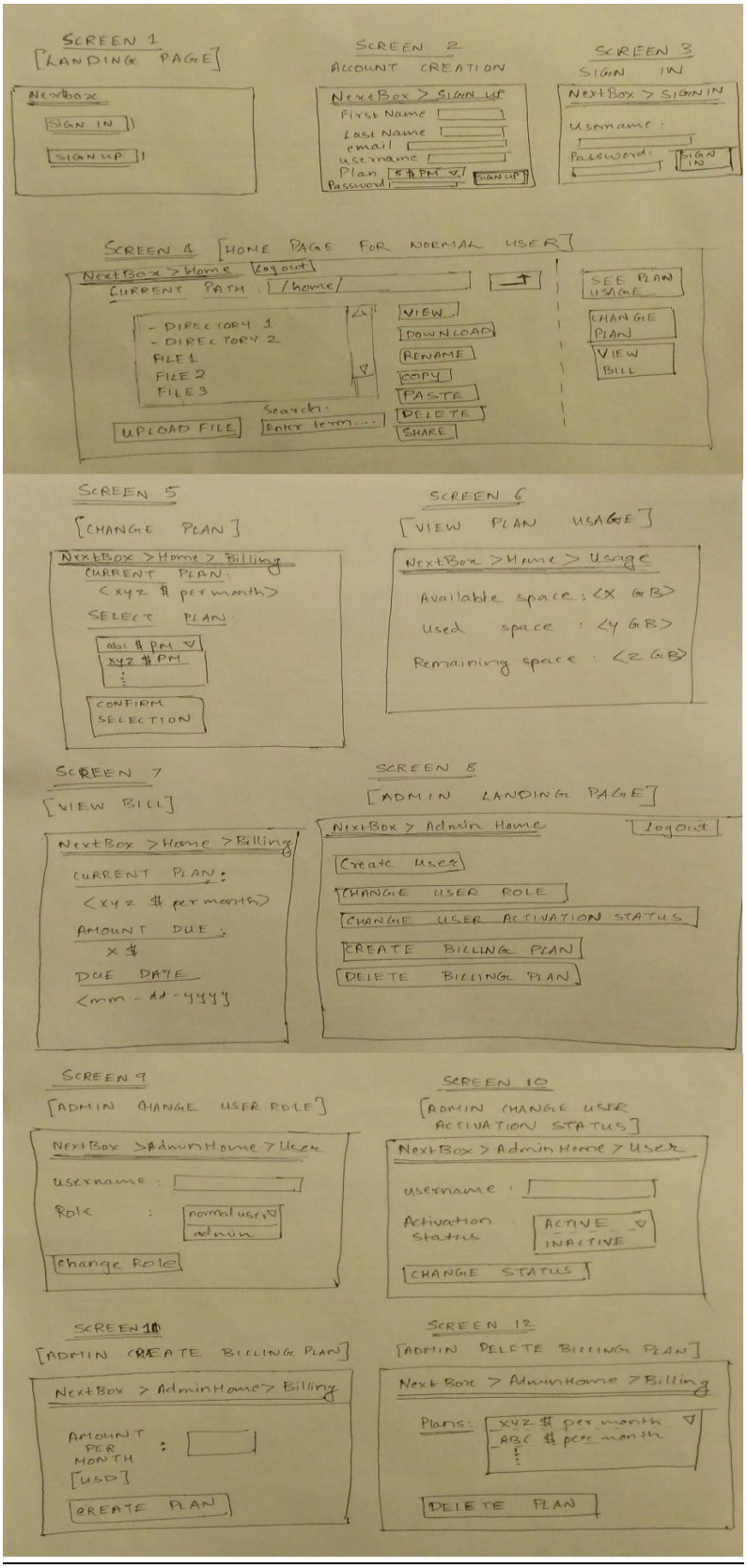
a. Admin Use Case Diagram:



b. User Use Case Diagram

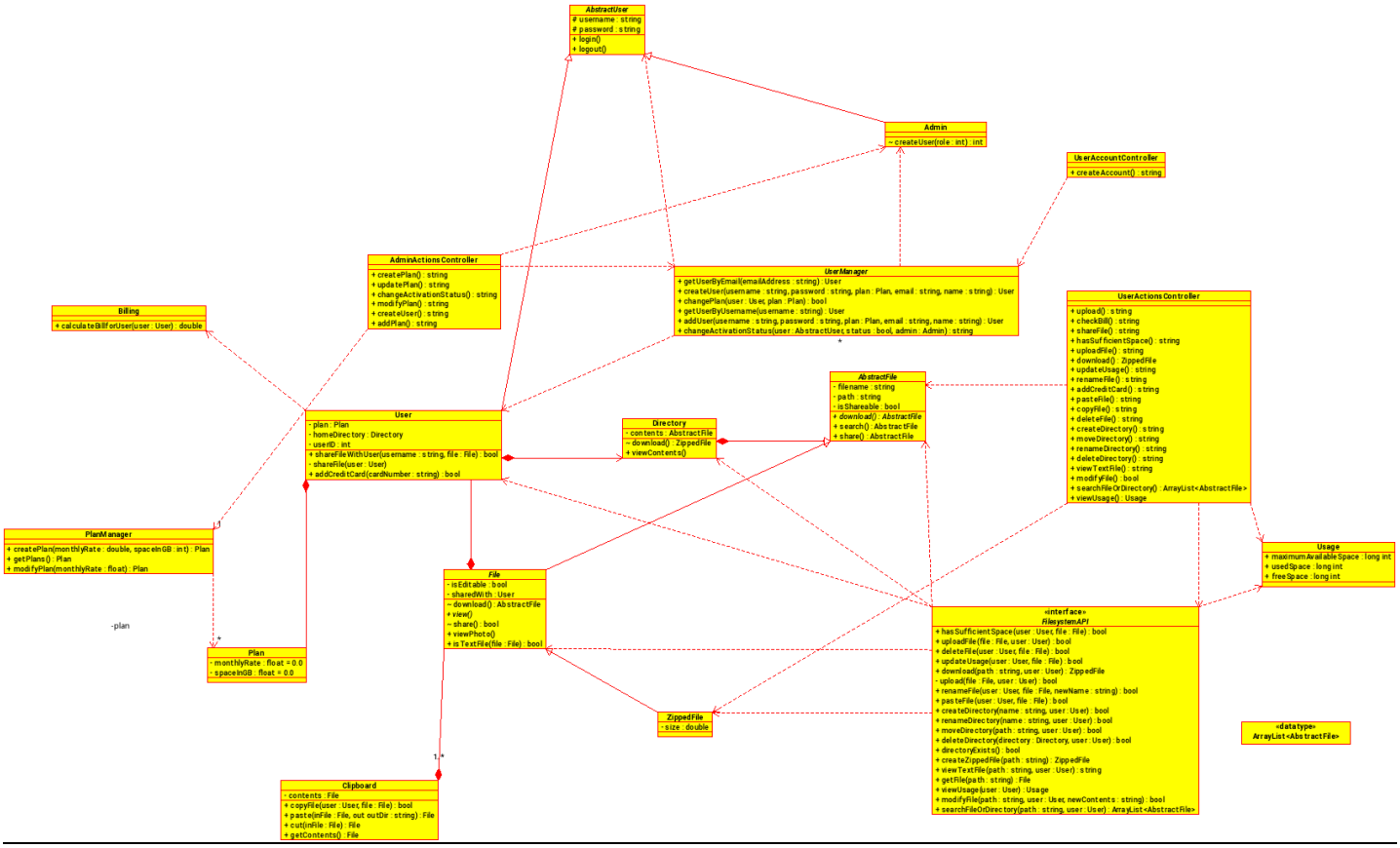

NextBox
User
Create Account
Change Directory Structure
Create Directory
Delete Directory
Move Directory
<<extend>>
<<extend>>
<<extend>>
Manage Files
Edit File
cut
copy
paste
Delete file
rename
<<extend>>
<<extend>>
<<extend>>
<<extend>>
<<extend>>
Upload File
Download File
View Text Files
View Photos
Search for File
See Usage of Account
Change Plan
Share File
Add Credit Card

- **UI Mockup**


SCREEN 1
[LANDING PAGE]
NextBox
SIGN IN
SIGN UP
SCREEN 2
ACCOUNT CREATION
NextBox > SIGN UP
First Name
Last Name
email
Username
Plan
Password
SIGN UP
SCREEN 3
SIGN IN
NextBox > SIGN IN
Username:
Password:
SIGN IN
SCREEN 4 [HOME PAGE FOR NORMAL USER]
NextBox > Home
Logout
CURRENT PATH: /home/
- DIRECTORY 1
- DIRECTORY 2
FILE 1
FILE 2
FILE 3
UPLOAD FILE
Search:
Enter term....
VIEW
DOWNLOAD
RENAME
COPY
PASTE
DELETE
SHARE
SEE PLAN USAGE
CHANGE PLAN
VIEW BILL
SCREEN 5
[CHANGE PLAN]
NextBox > Home > Billing
CURRENT PLAN:
<xyz $ per month>
SELECT PLAN:
abc $ PM
xyz $ PM
CONFIRM SELECTION
SCREEN 6
[VIEW PLAN USAGE]
NextBox > Home > Usage
Available space: <X GB>
Used space: <Y GB>
Remaining space: <Z GB>
SCREEN 7
[VIEW BILL]
NextBox > Home > Billing
CURRENT PLAN:
<xyz $ per month>
AMOUNT DUE:
X $
DUE DATE
<mm-dd-yyyy
SCREEN 8
[ADMIN LANDING PAGE]
NextBox > Admin Home
Logout
Create User
CHANGE USER ROLE
CHANGE USER ACTIVATION STATUS
CREATE BILLING PLAN
DELETE BILLING PLAN
SCREEN 9
[ADMIN CHANGE USER ROLE]
NextBox > Admin Home > User
username:
Role:
normal user
admin
change Role
SCREEN 10
[ADMIN CHANGE USER ACTIVATION STATUS]
NextBox > Admin Home > User
username:
Activation Status:
ACTIVE
INACTIVE
CHANGE STATUS
SCREEN 11
[ADMIN CREATE BILLING PLAN]
NextBox > Admin Home > Billing
Amount Per Month [USD]:
CREATE PLAN
SCREEN 12
[ADMIN DELETE BILLING PLAN]
Next Box > Admin Home > Billing
Plans:
xyz $ per month
ABC $ per month
DELETE PLAN

- **Data Storage**

Database to be used: MySQL
Data to be stored in it:

i. User tables (having user account information necessary for login, file mapping paths, payment details)
ii. Billing information for users
iii. List of available plans

- **Class Diagram**