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SMART SPATIUM: A DYNAMIC COLLABORATIVE WORKING SPACE FOR SMART CAMPUS

Salfarina Abdullah, Nurfarah Shazwani Nor Azmi and Sazly Anuar

INTRODUCTION

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- Smart Spatium is an online community space **developed for Higher Learning Institution students.**
- The motivations for this development are:
  - ✓Most of the assignments and projects given by the lecturer are teamwork-based.
  - ✓Typically, students will have to divide the given tasks among their team members, and each will do their part separately.
  - ✓Pseudo team

ISSUES??

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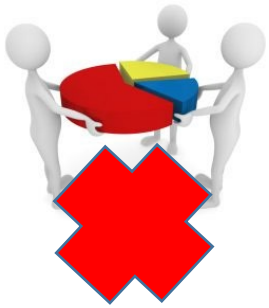
- Difficult to have F2F discussion due to different locations regularly .

- No centralized platform for storing the folders containing their assignments and project documents.



- Lacking of mechanism that provides evidence of contribution of each team member in completing a task.

OBJECTIVES

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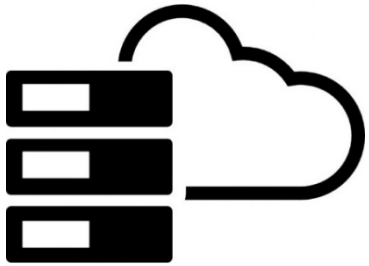
✓ To **design and develop a web application** that allows students to :

Prove Contribution

Commit & Collaborate



Centralized Platform

LITERATURE REVIEW

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	SOCIAL LEARNING			SOCIAL MEDIA			Smart Spatium
KEY FUNCTIONS	Edmodo	Google Docs	Dropbox Paper	Facebook	Google+	Skype	
Edit the documents simultaneously.	NO	YES	YES	NO	YES	YES	YES
View contribution of each team members.	NO	YES	NO	NO	NO	NO	YES
Post comment on timeline with variety types of file format used to be shared on specific folder.	YES	NO	NO	YES	YES	NO	YES
Comment on specific part of the documentation	NO	YES	YES	NO	NO	NO	YES
Set alert notification for project submission date.	YES	NO	YES	YES	YES	YES	YES

LITERATURE REVIEW

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	SOCIAL LEARNING			SOCIAL MEDIA			Smart Spatium
KEY FUNCTIONS	Edmodo	Google Docs	Dropbox Paper	Facebook	Google+	Skype	
Discuss with team members in the chat board.	YES	YES	YES	YES	NO	YES	YES
Checklist activities for assignment and project.	YES	NO	YES	YES	NO	NO	YES
Invite team members to collaborate.	YES	YES	YES	YES	YES	YES	YES
Provide folders as a centralized platform to store the created documents	NO	YES	YES	NO	NO	NO	YES

METHODOLOGY

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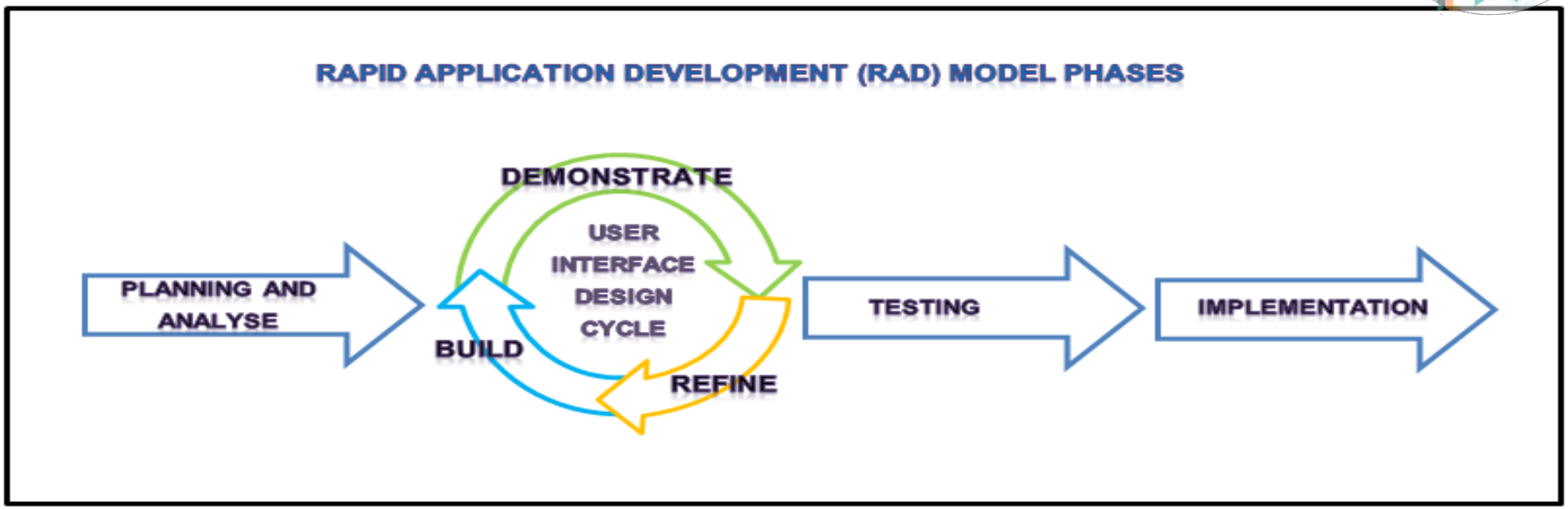

1. List down and Analyze the requirement needed.
2. 1st Cycle : Graphical User Interface (GUI).
3. 2nd Cycle : Back end Implementation (Database).
4. 3rd Cycle : Web Functions.
5. Smart Spatium web application Testing.
6. Smart Spatium deployment for demonstration.

SYSTEM ARCHITECTURE

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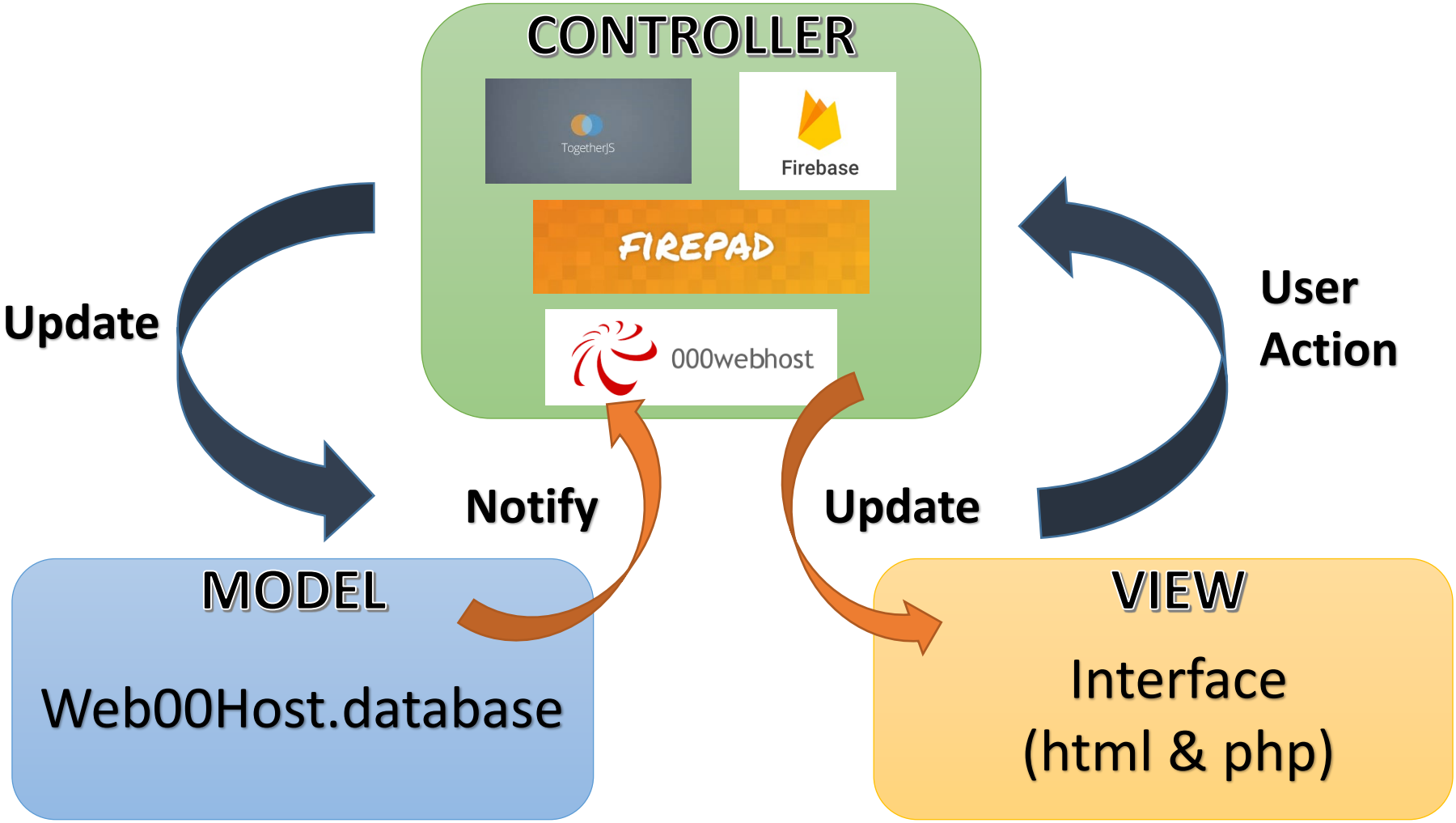
MVC Architecture Pattern



USE CASE DIAGRAM

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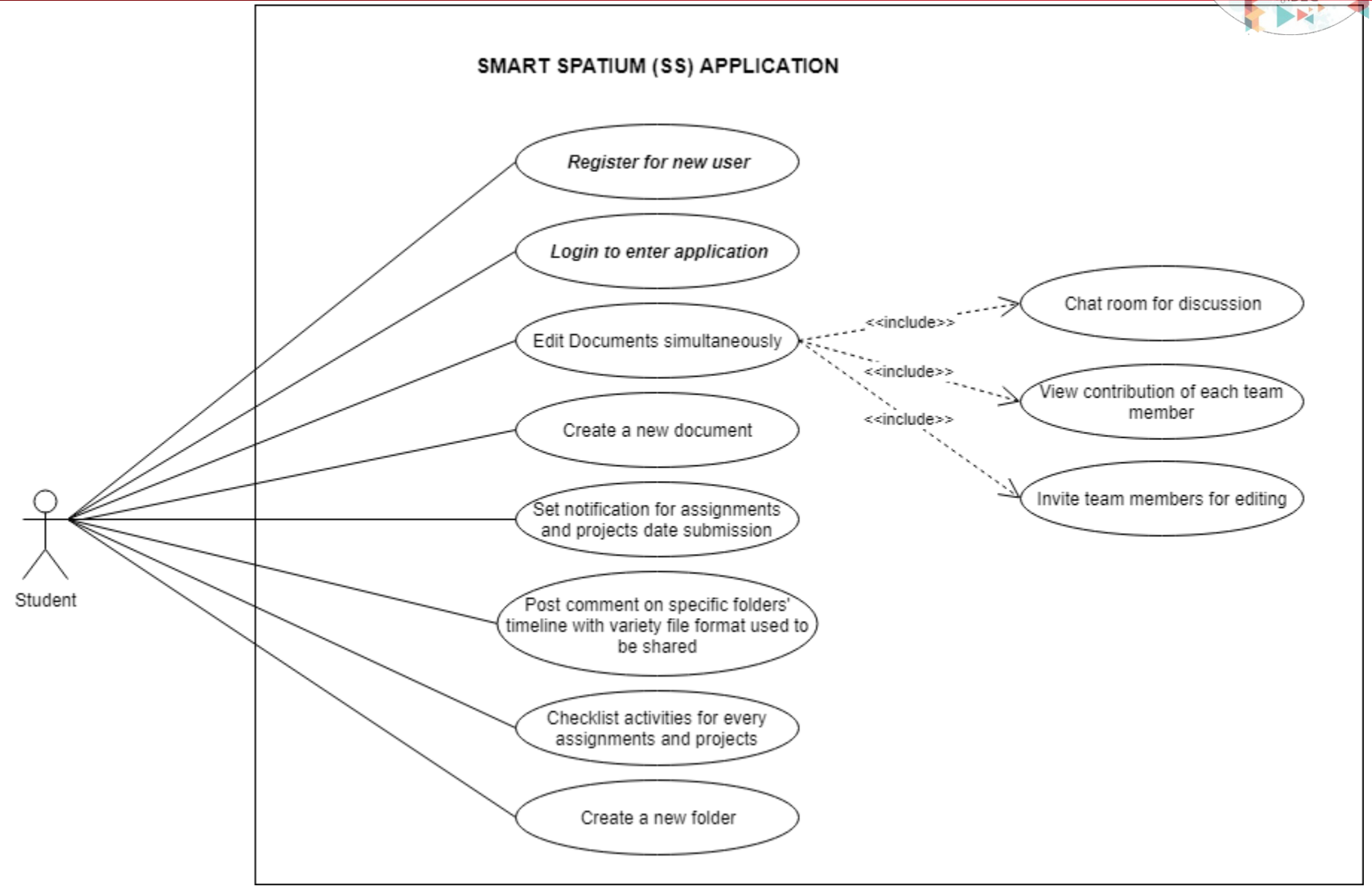

ACTIVITY DIAGRAM

SMART SPATIUM FEATURES

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- Edit document of the assignments or projects simultaneously among team members.
- Provide centralized platform for storing folders containing the assignments and projects.
- Make a post comment space to have discussion among their team members as well as to alert their team members.
- Set alert notification for assignments and projects submission.
- Create and check document checklist.
- Provide an evidence of contribution.

SMART SPATIUM SCREENSHOTS (1)

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Index Page:

SMART SPATIUM SCREENSHOTS (2)

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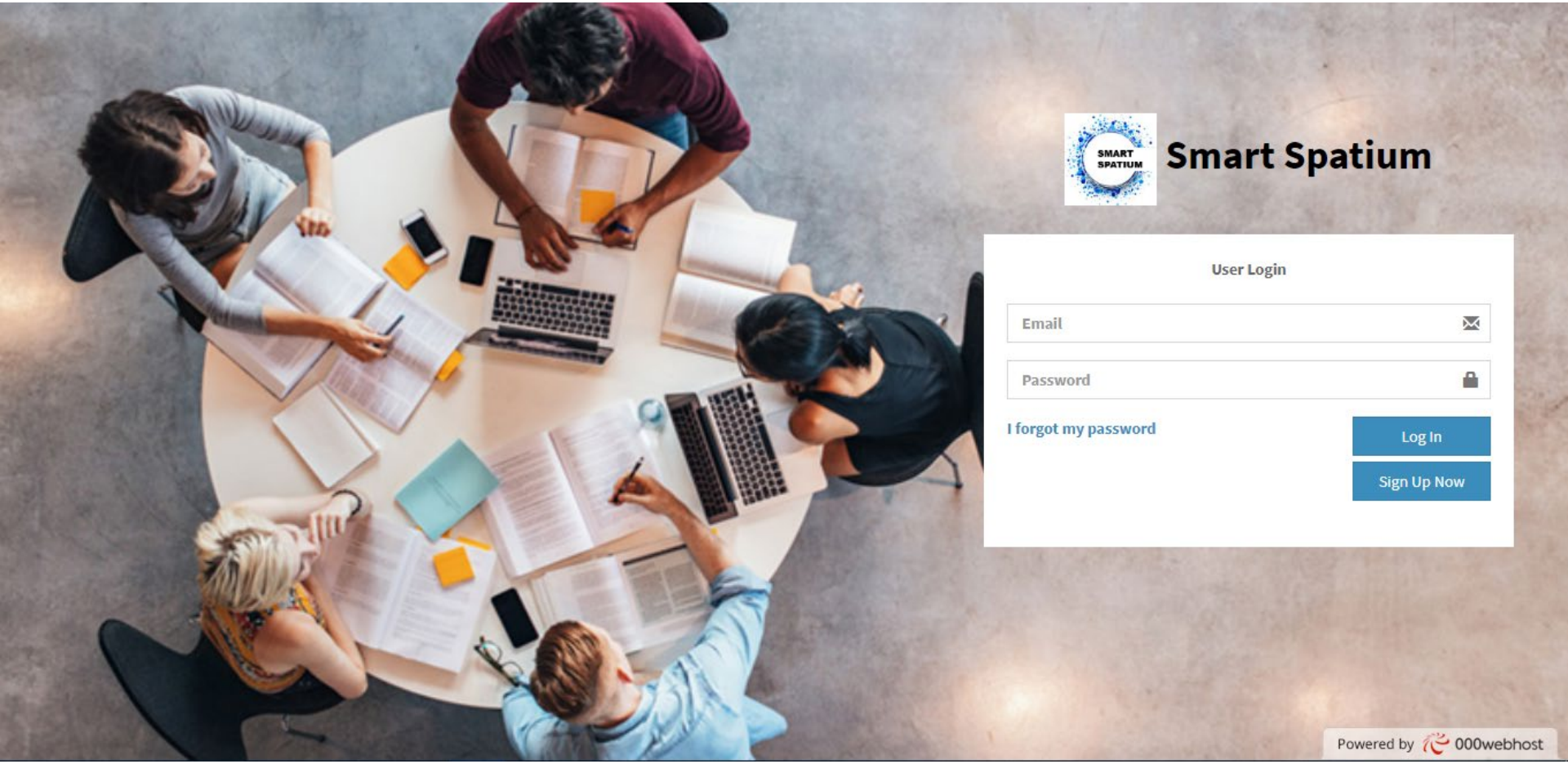
Login Page:



SMART SPATIUM SCREENSHOTS (3)

Home Page:

@farahshazwani

farahshazwani azmi (184170)

My BIO:
I'm Final Year Student in UPM.

Post Comment

Says:@farahshazwani

Post

Insert Comment Here

farahshazwani

Our submission date only 2 more days left !!!

farahshazwani

Don't forget our assignment due date on 25/12/2018

farahshazwani

Hi my team

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SMART SPATIUM SCREENSHOTS (4)

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Home Page:

@najwa

najwa azmi (U123BC)

My BIO:
I'm Lecturer in UPM.

Post Comment

Says:@najwa

Post

Insert Comment Here

najwa

I finish my part already.

farahshazwani

1 more day left !!!!

farahshazwani

Our submission date only 2 more days left !!!

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SMART SPATIUM SCREENSHOTS (5)

Home Page:

@syazani

syazani hussin (182222)

My BIO:
I'm Software Engineer.

Post Comment

Says:@syazani

Post

Insert Comment Here

syazani

I'm done too !! Sorry for my late ...

najwa

I finish my part already.

farahshazwani

1 more day left !!!!

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SMART SPATIUM SCREENSHOTS (6)

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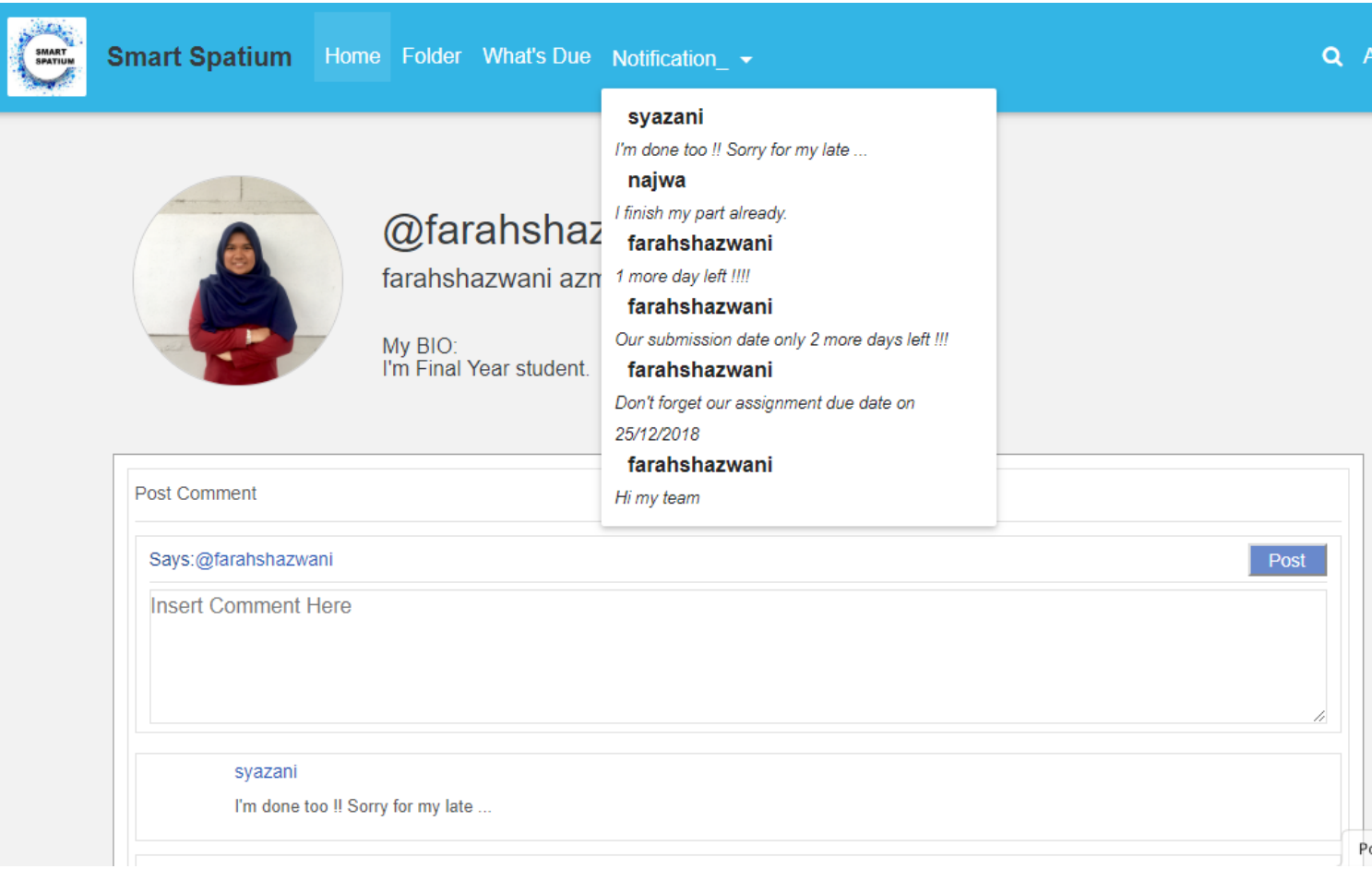
Alert Notification Page:



SMART SPATIUM SCREENSHOTS (7)

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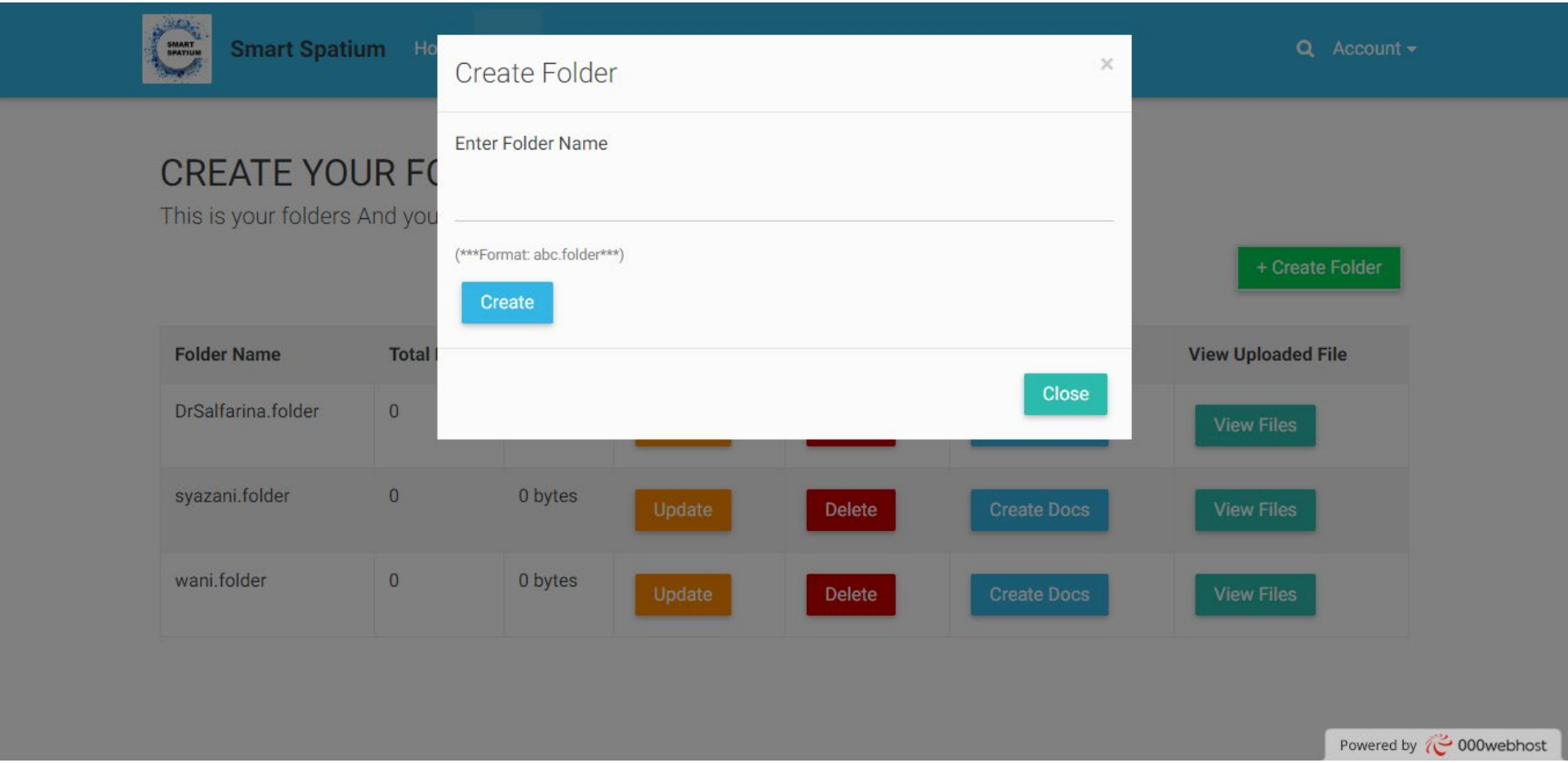
Create Folder Page:



SMART SPATIUM SCREENSHOTS (8)

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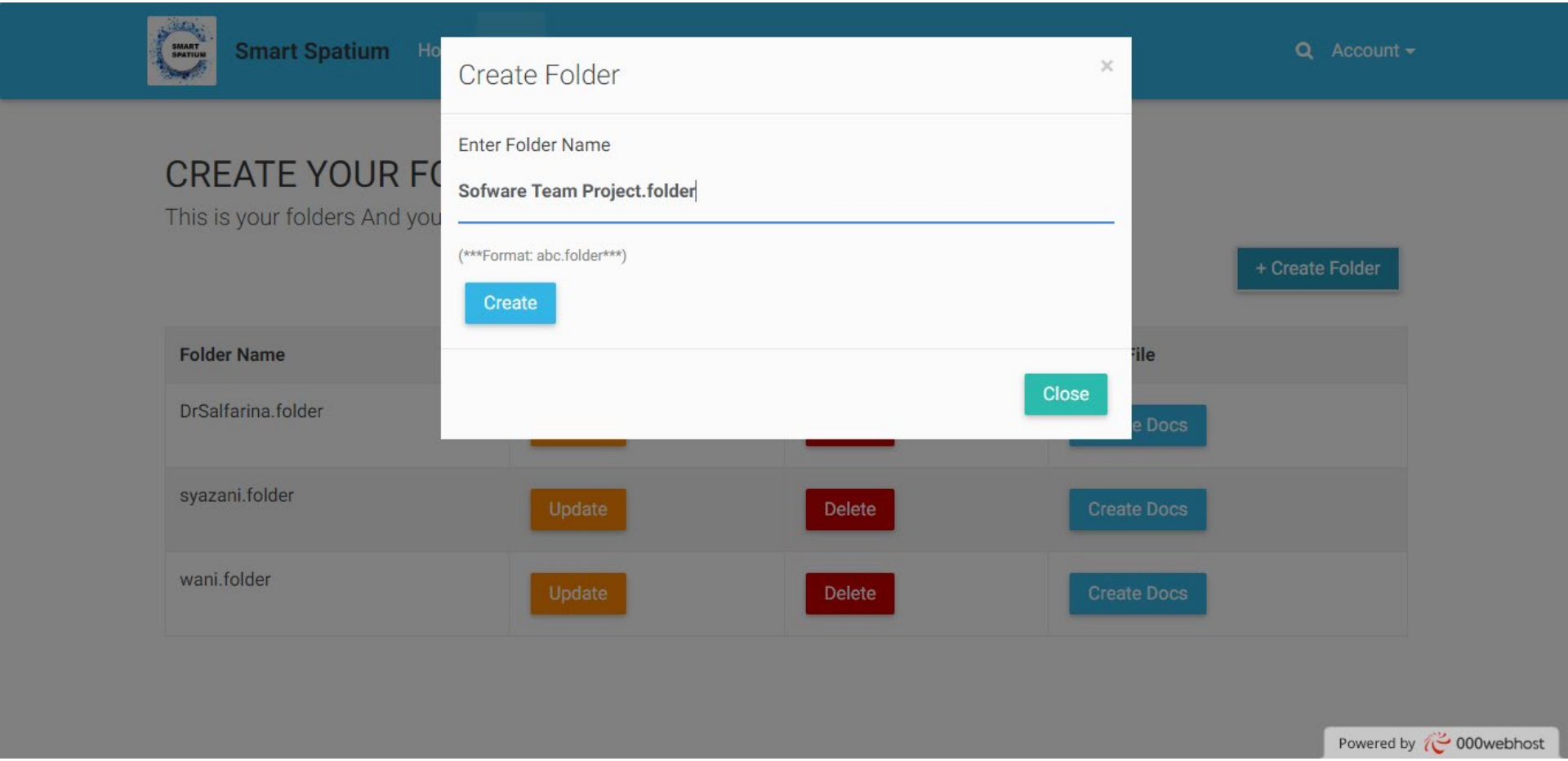

SMART SPATIUM SCREENSHOTS (9)

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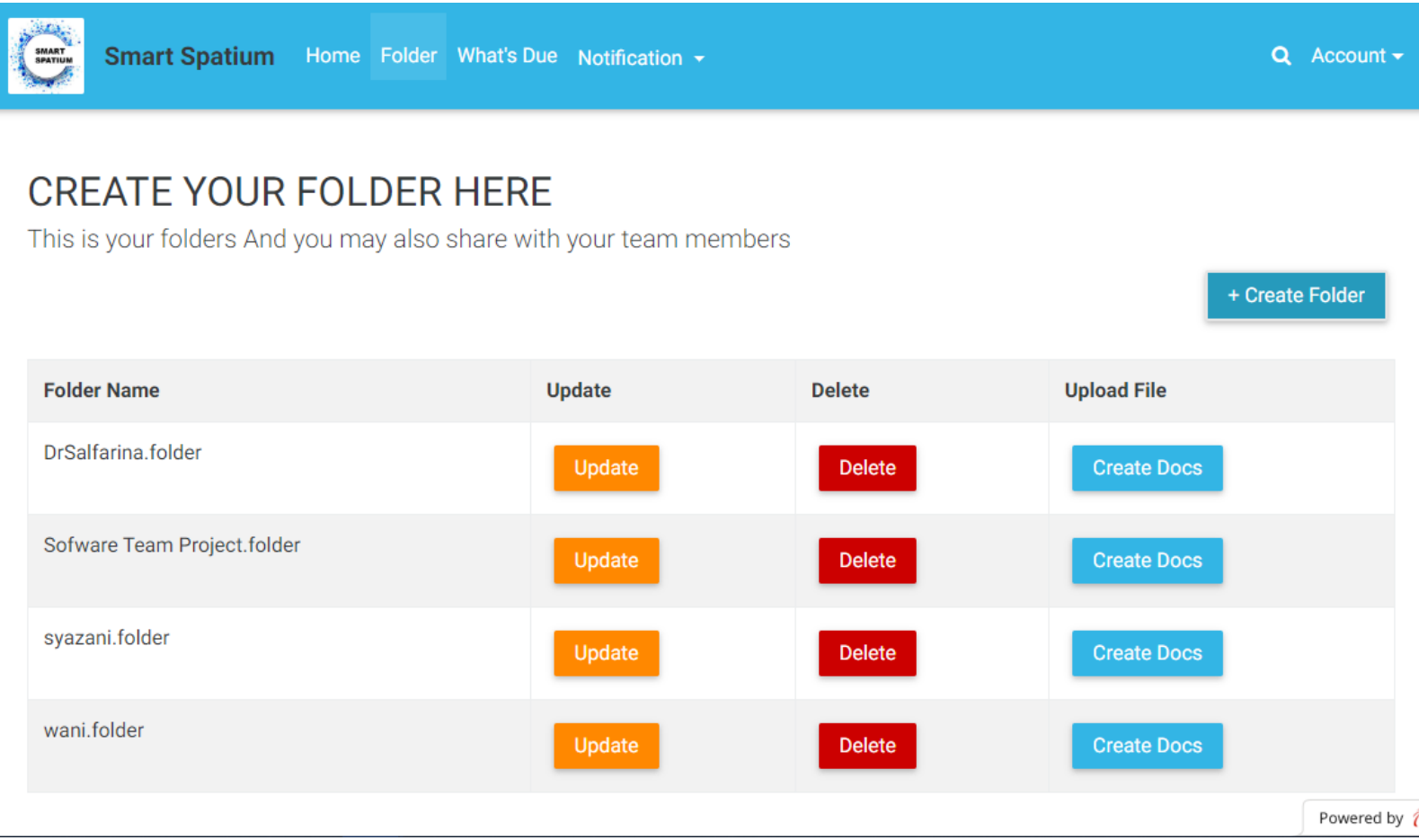
Folder Page:



SMART SPATIUM SCREENSHOTS (10)

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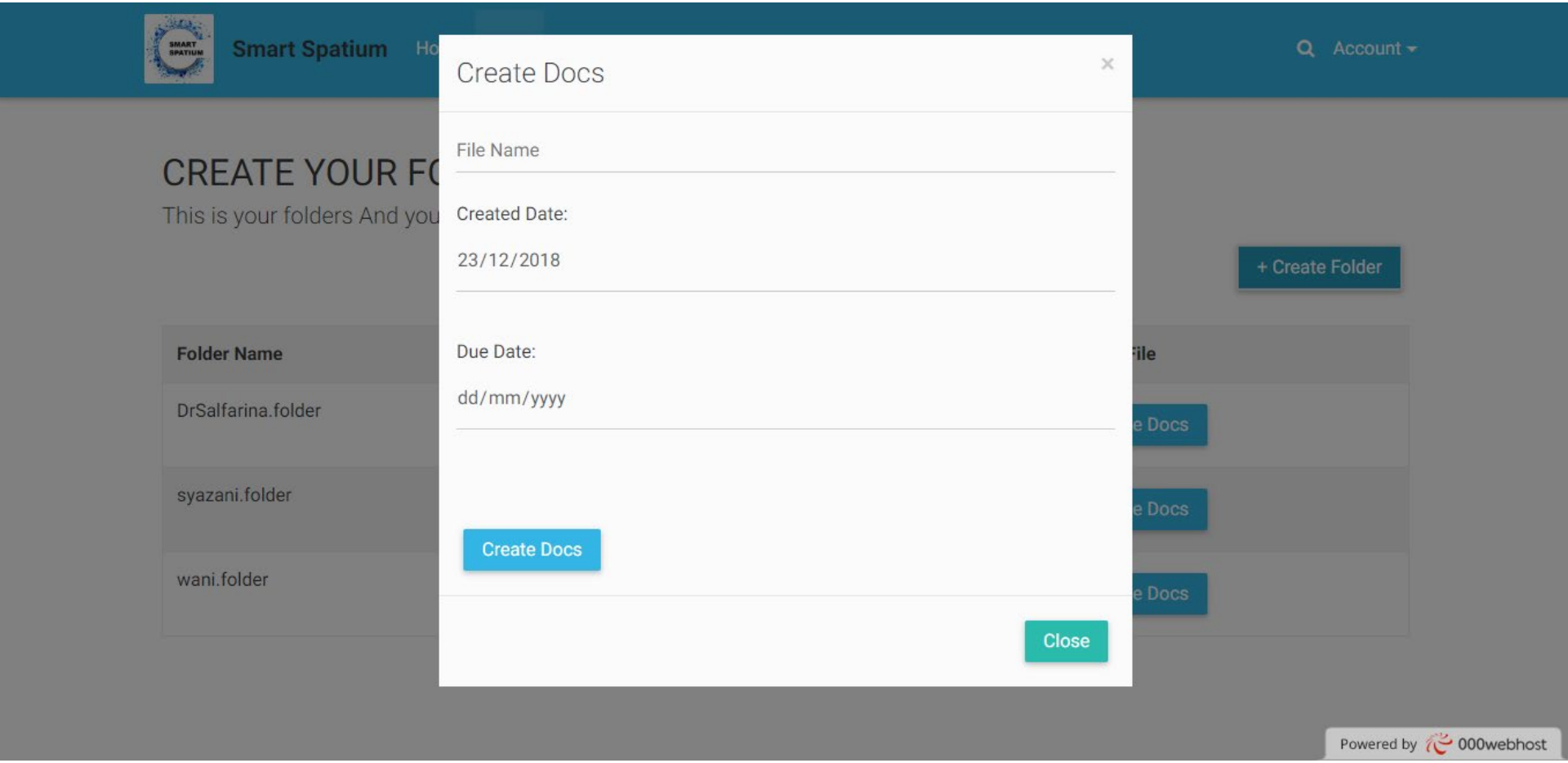

SMART SPATIUM SCREENSHOTS (11)

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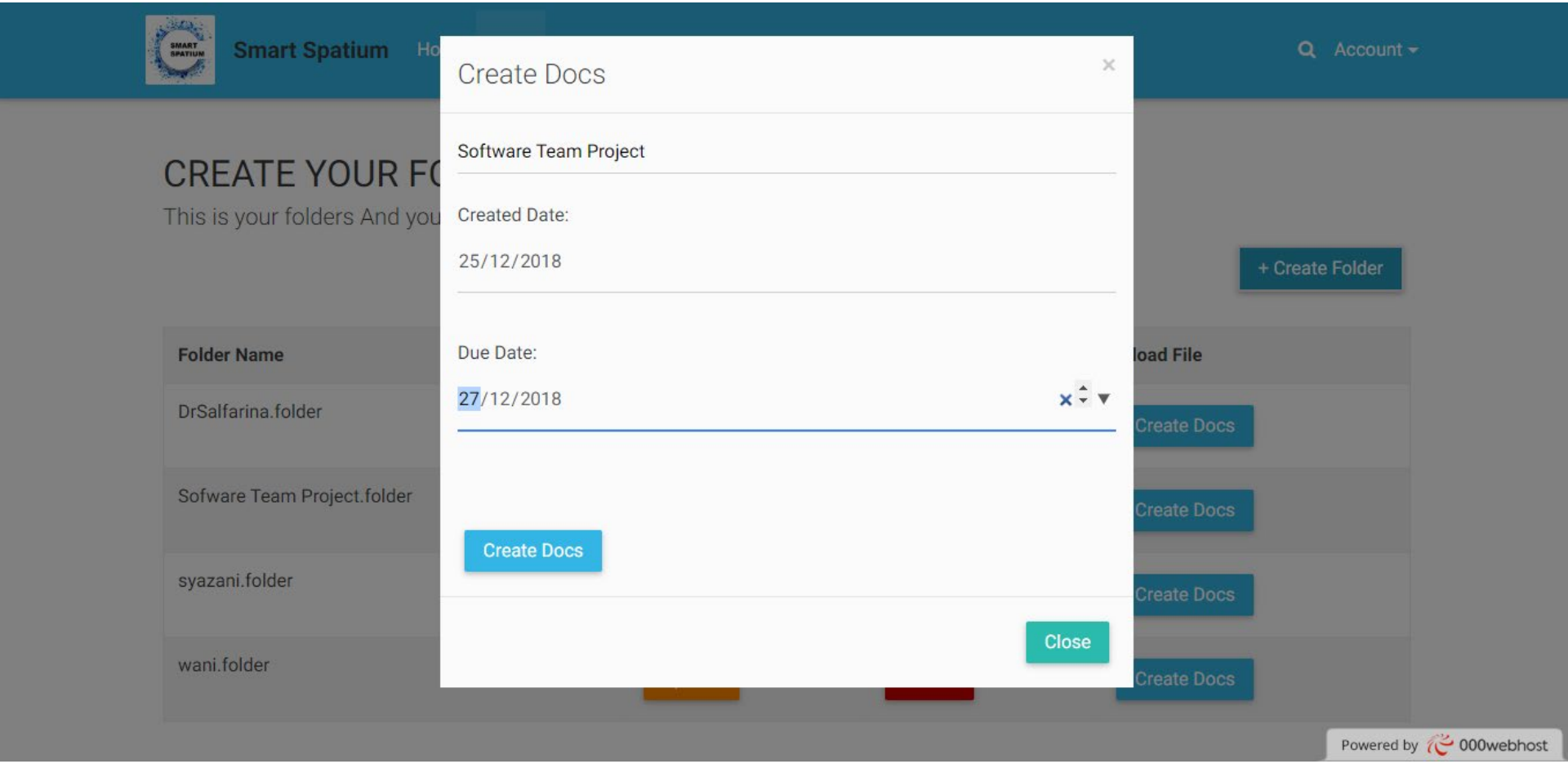
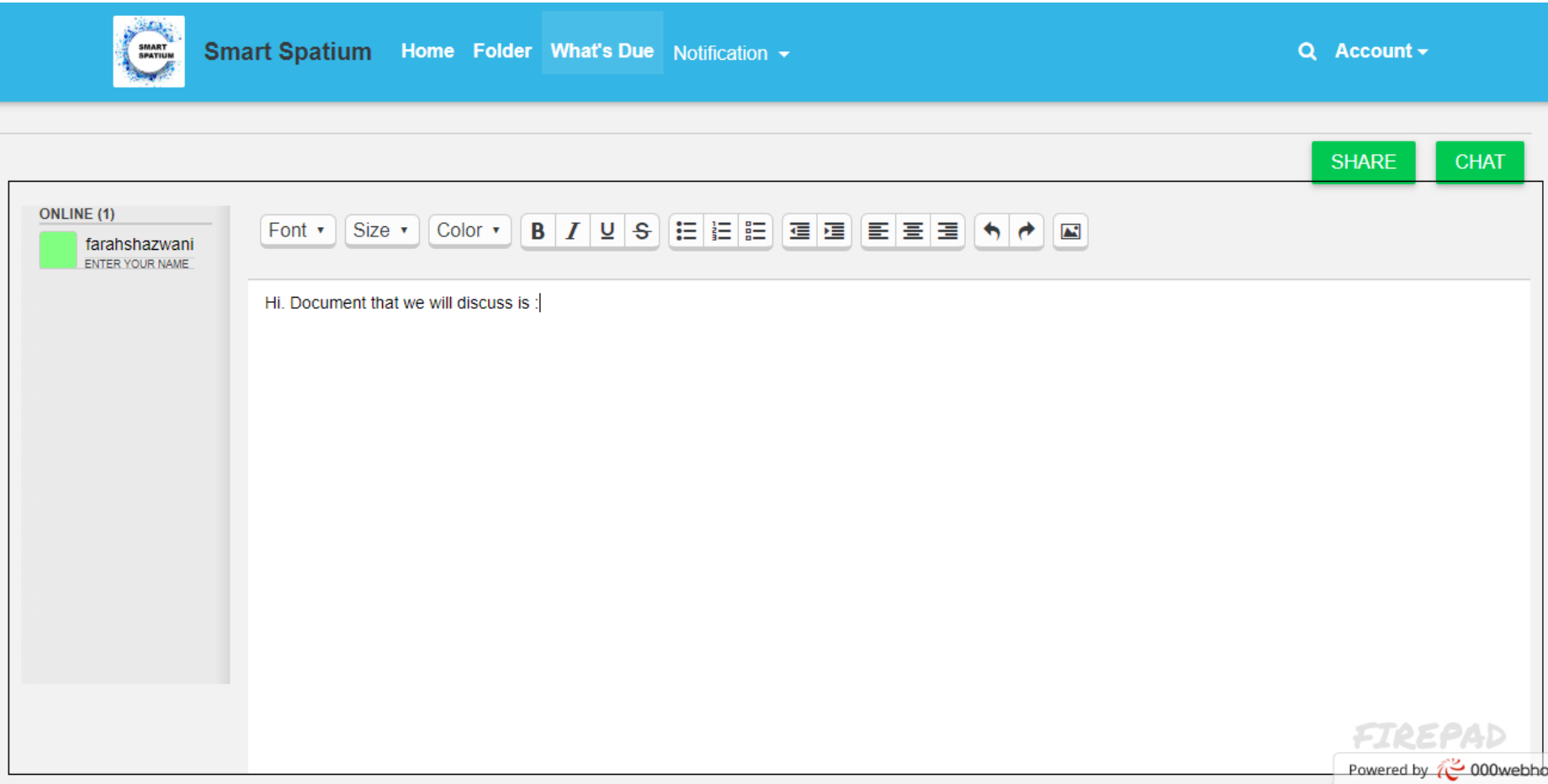


SMART SPATIUM SCREENSHOTS (12)

Edit Document Page:



SMART SPATIUM SCREENSHOTS (13)

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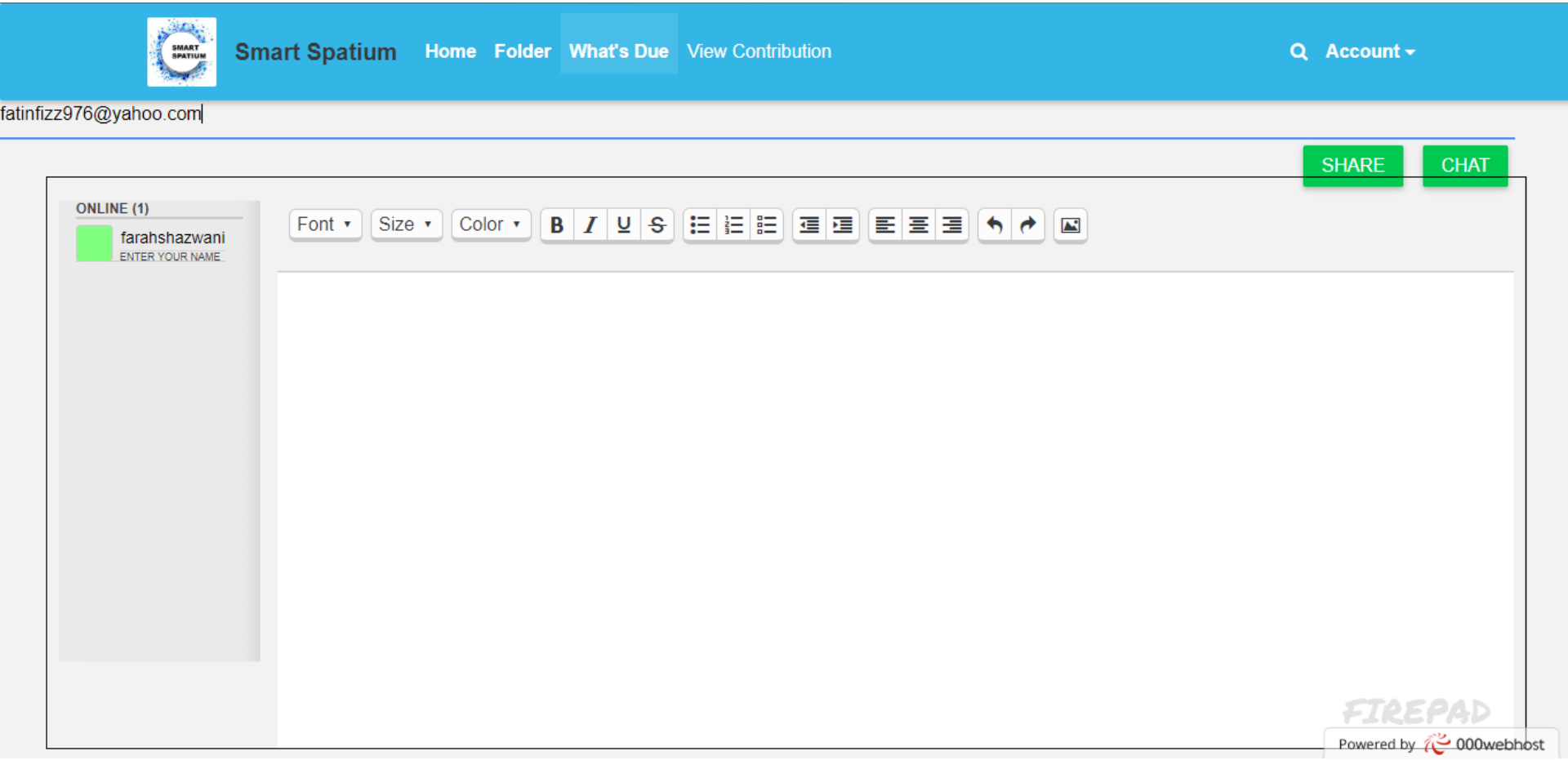
Edited Document Page:



SMART SPATIUM SCREENSHOTS (14)

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Share Link Page:

Smart Spatium | Home | Folder | What's Due | Notification | Account

SHARE | CHAT

ONLINE (1)

farahshazwani
ENTER YOUR NAME

Font | Size | Color | B I U S

Hi. Document that we will discuss is :

**Smart Spatium (SS) is an online community space developed fo
because:**

- Most of the assignments and projects given by the lecturer would be in a team.
- Usually students need to divide the task among their team members and they will do th

Invite a friend

Copy and paste this link over IM or email:

https://smartspatium1.000webhostapp.com/edit-

FIREPAD

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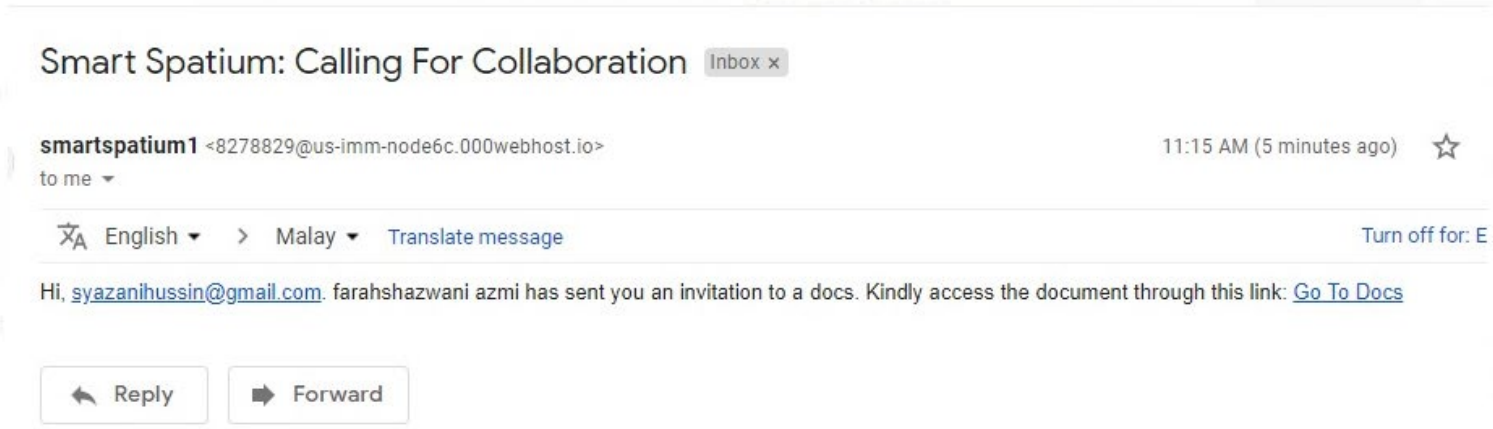
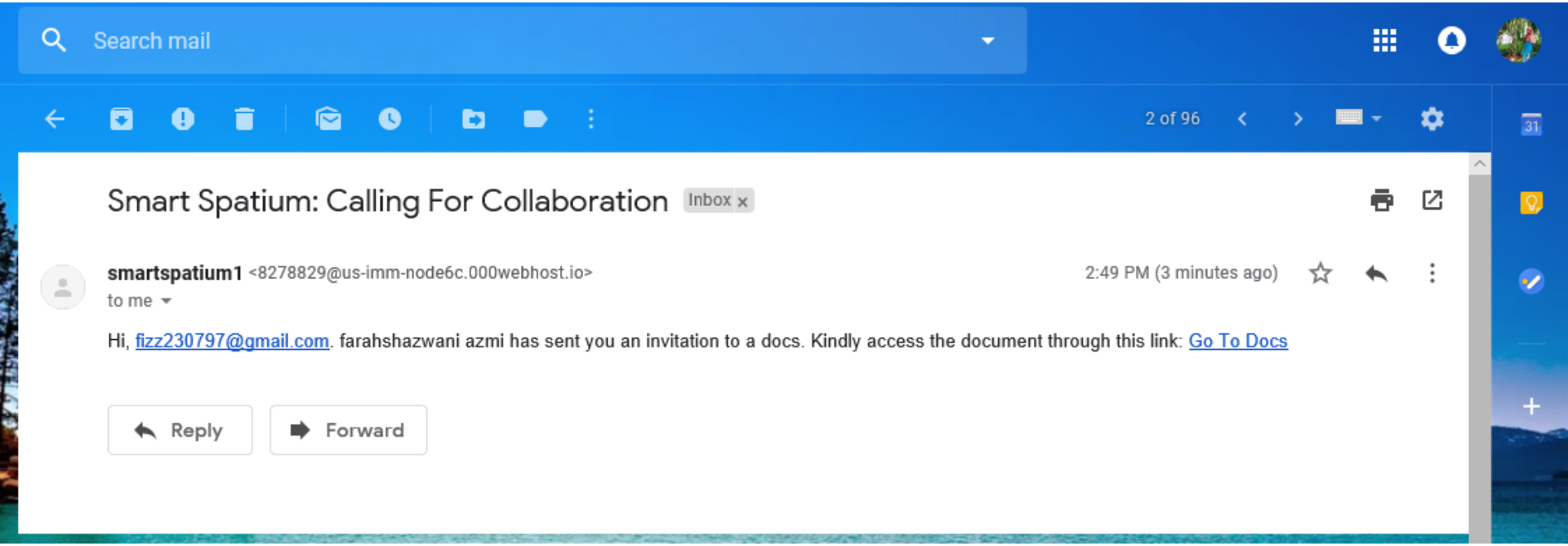
SMART SPATIUM SCREENSHOTS (15)

Invite Team Page:



SMART SPATIUM SCREENSHOTS (16)

Invite Team Page:



SMART SPATIUM SCREENSHOTS (17)

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Edited Document Page:

Smart Spatium | Home | Folder | What's Due | View Contribution | Account

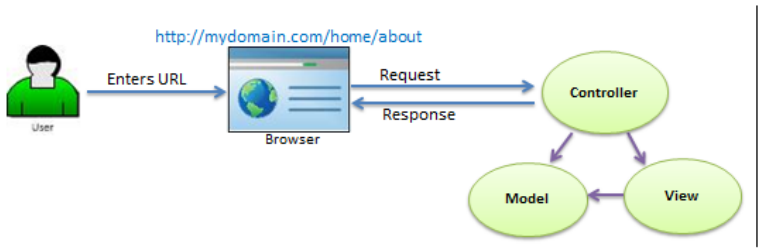
SHARE | CHAT

ONLINE (2)
- farahshazwani
  ENTER YOUR NAME
- Guest 82

Font | Size | Color | B | I | U | S

EXPECTED RESULT

- Edit document of the assignments or projects simultaneously among their team members.
- Provide centralized platform for storing folders' of the assignments and projects.
- Make a post comment space to have discussion among their team members and alert their team members.
- Set alert notification for assignments and projects submission.



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SMART SPATIUM SCREENSHOTS (18)

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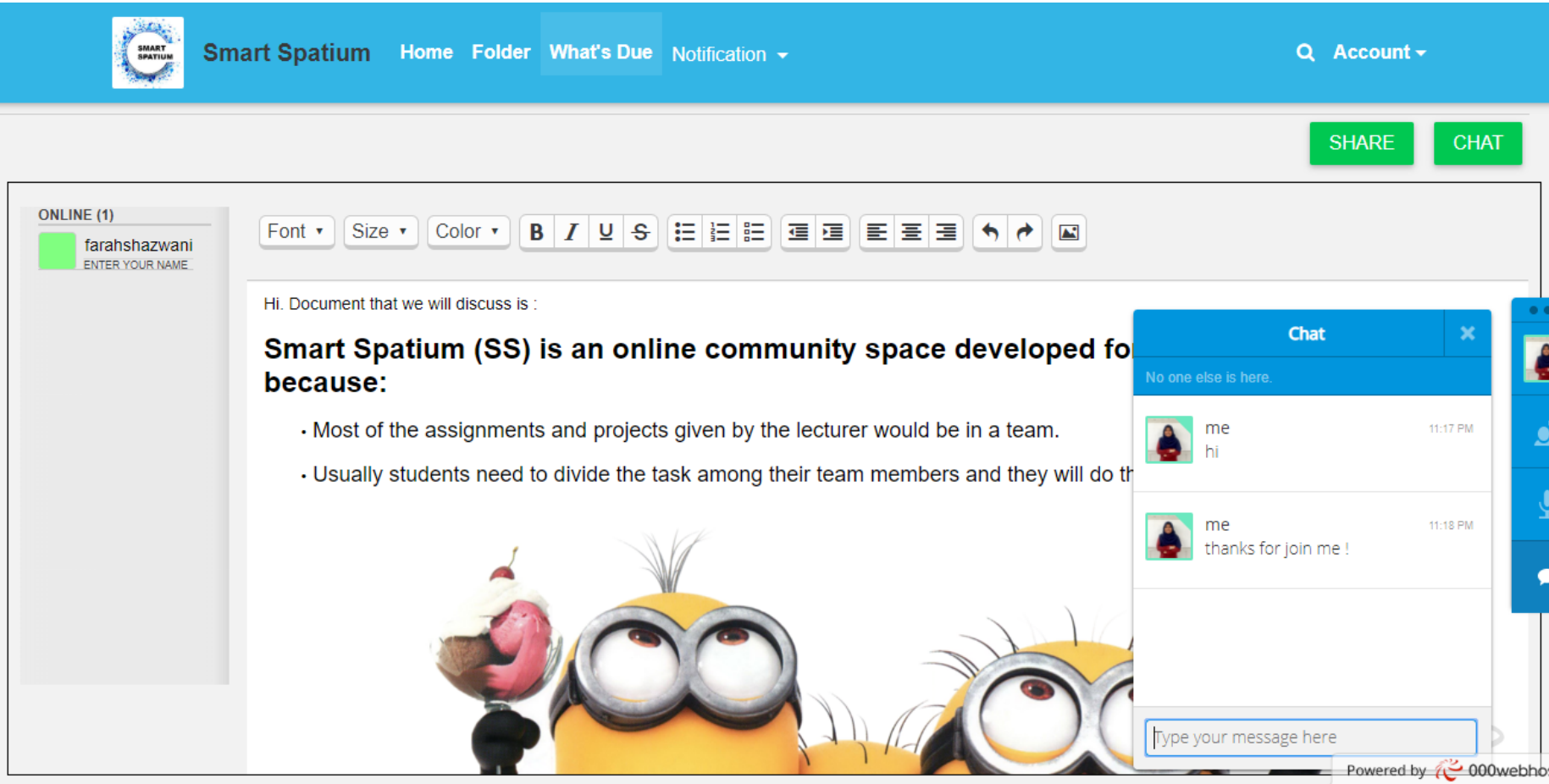
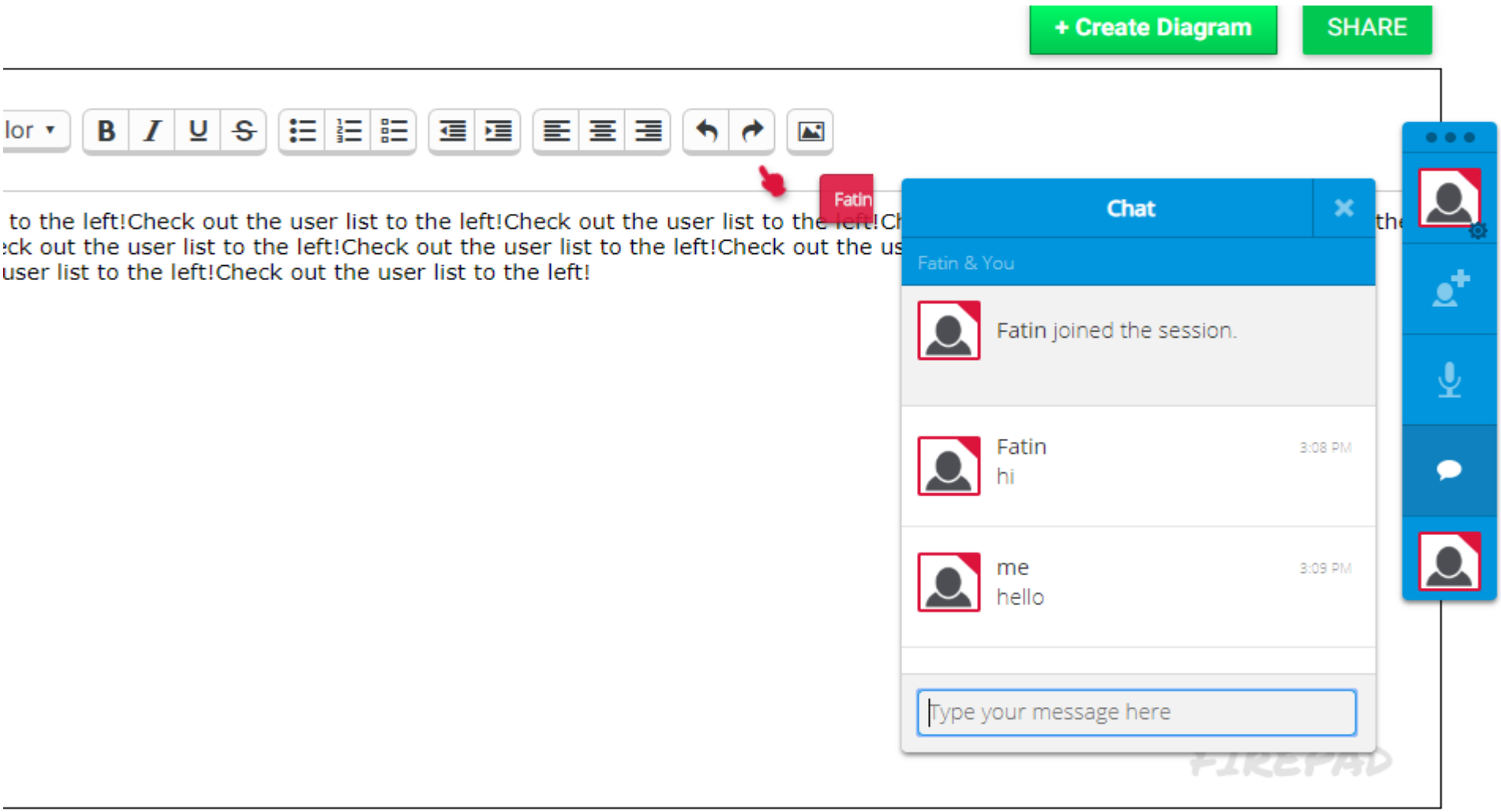
Chat Room Page:



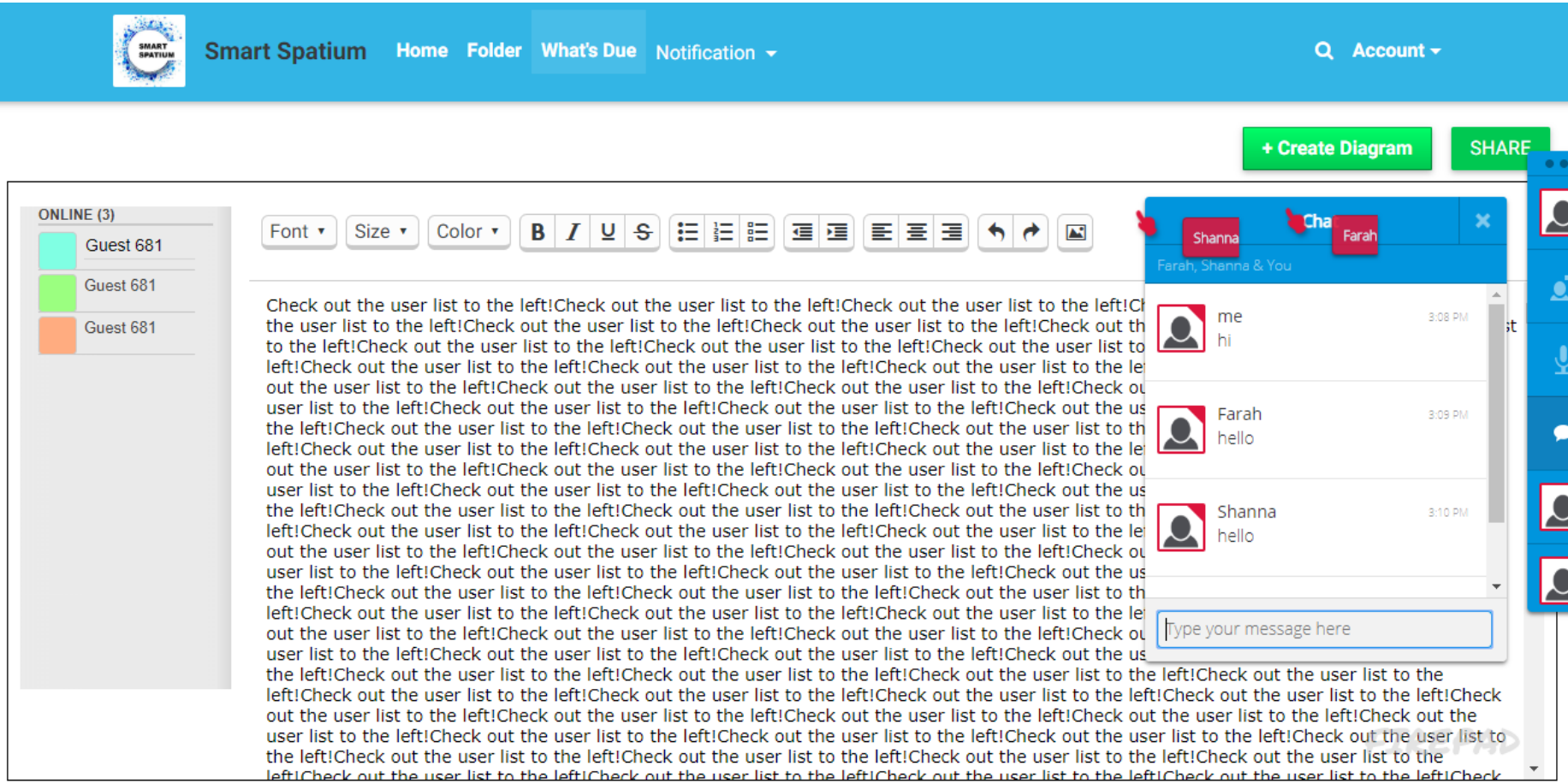
SMART SPATIUM SCREENSHOTS (19)

Chat Room Page:



SMART SPATIUM SCREENSHOTS (20)

Chat Room Page:



SMART SPATIUM SCREENSHOTS (21)

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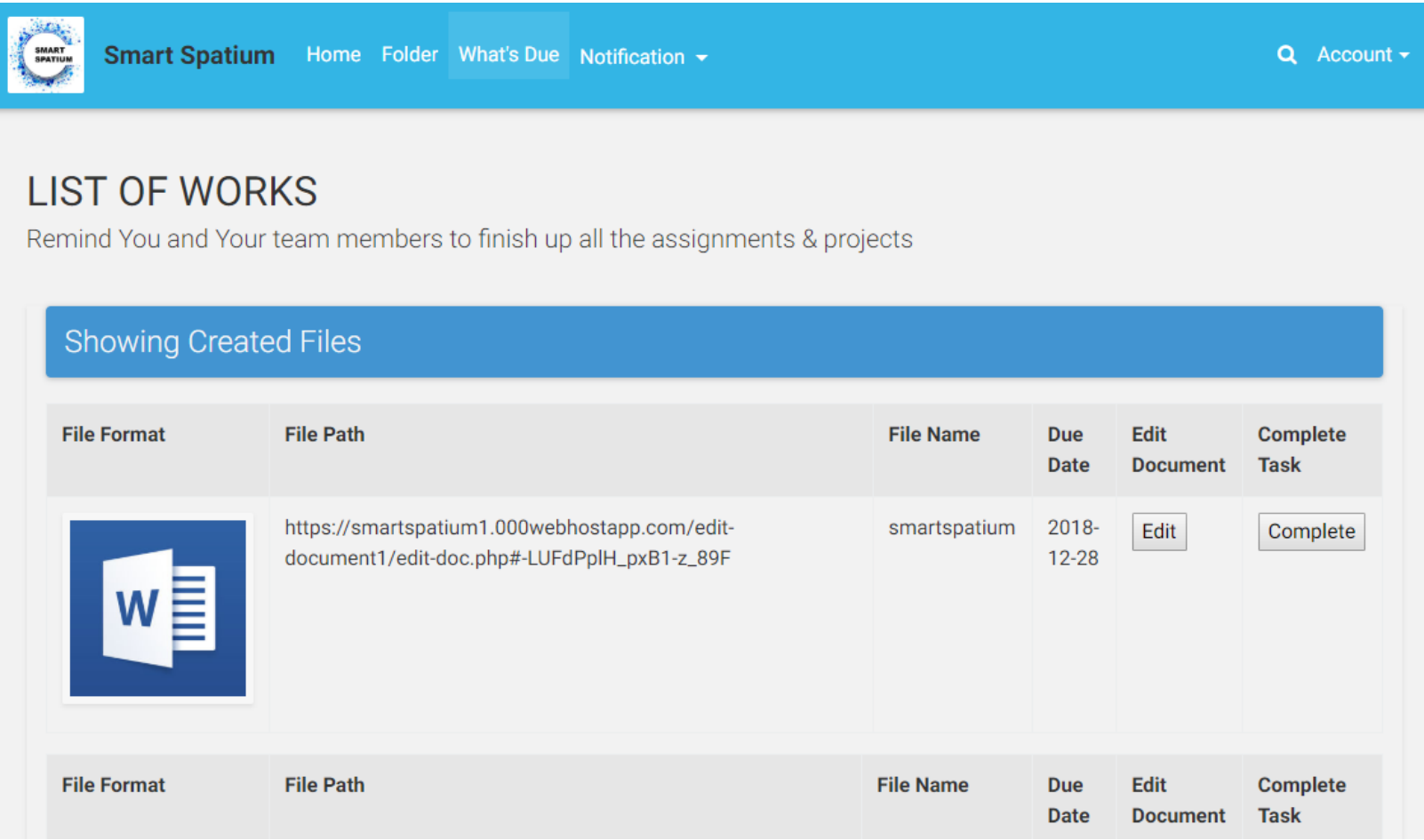
Document Checklist Page:



SMART SPATIUM SCREENSHOTS (22)

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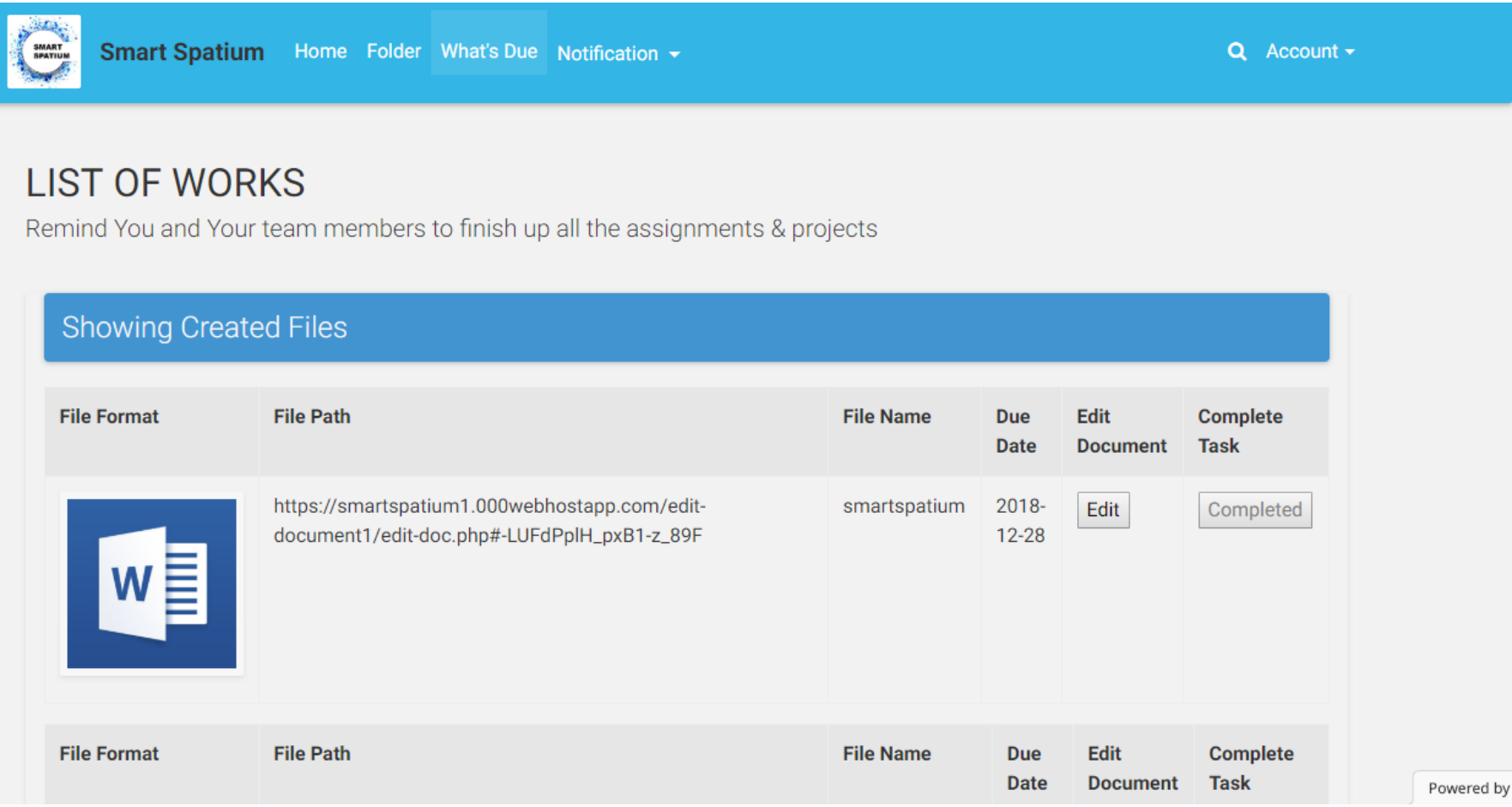
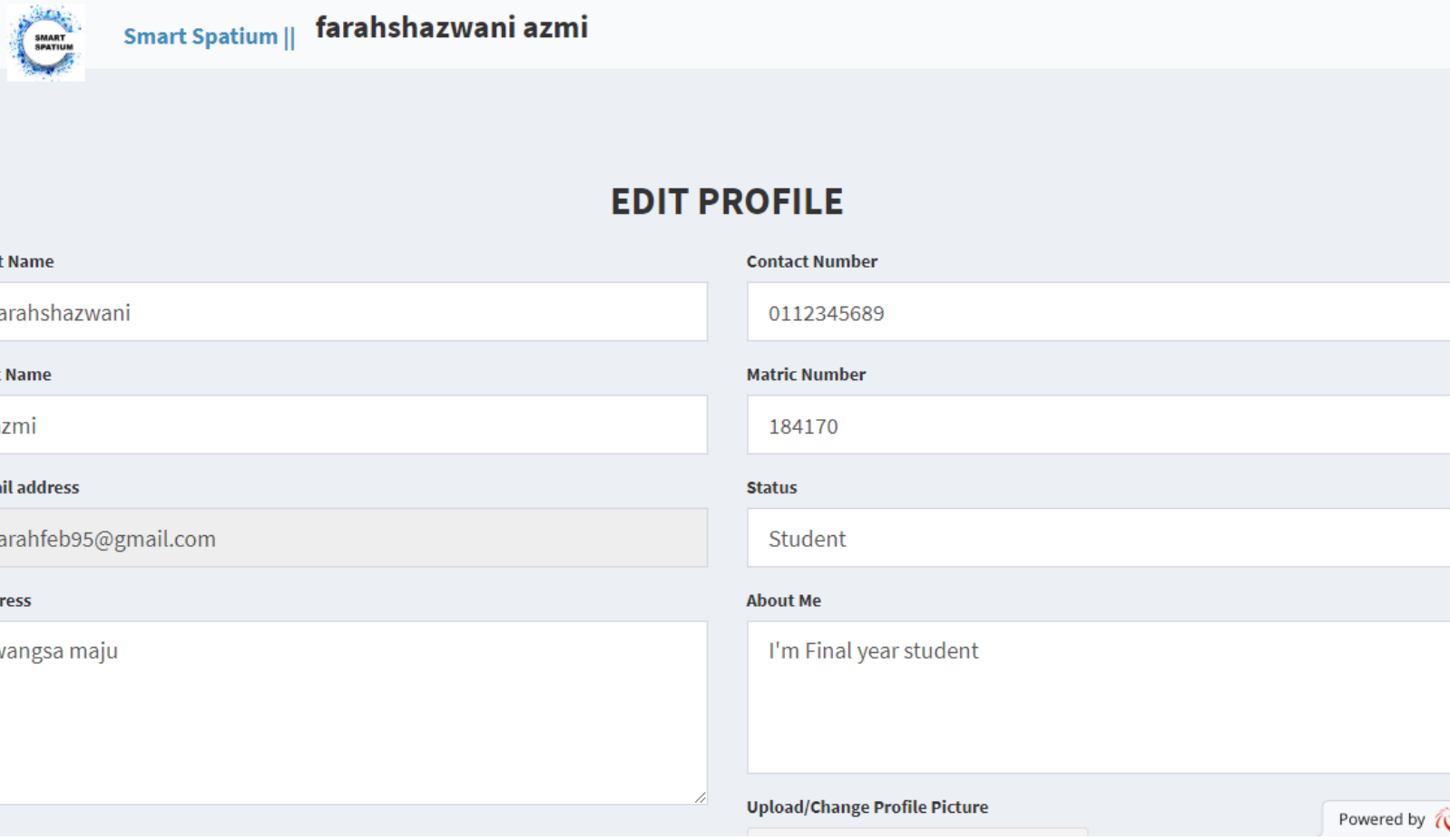
Checklist Completed Page:



SMART SPATIUM SCREENSHOTS (23)

Edit Profile Page:



SMART SPATIUM SCREENSHOTS (24)

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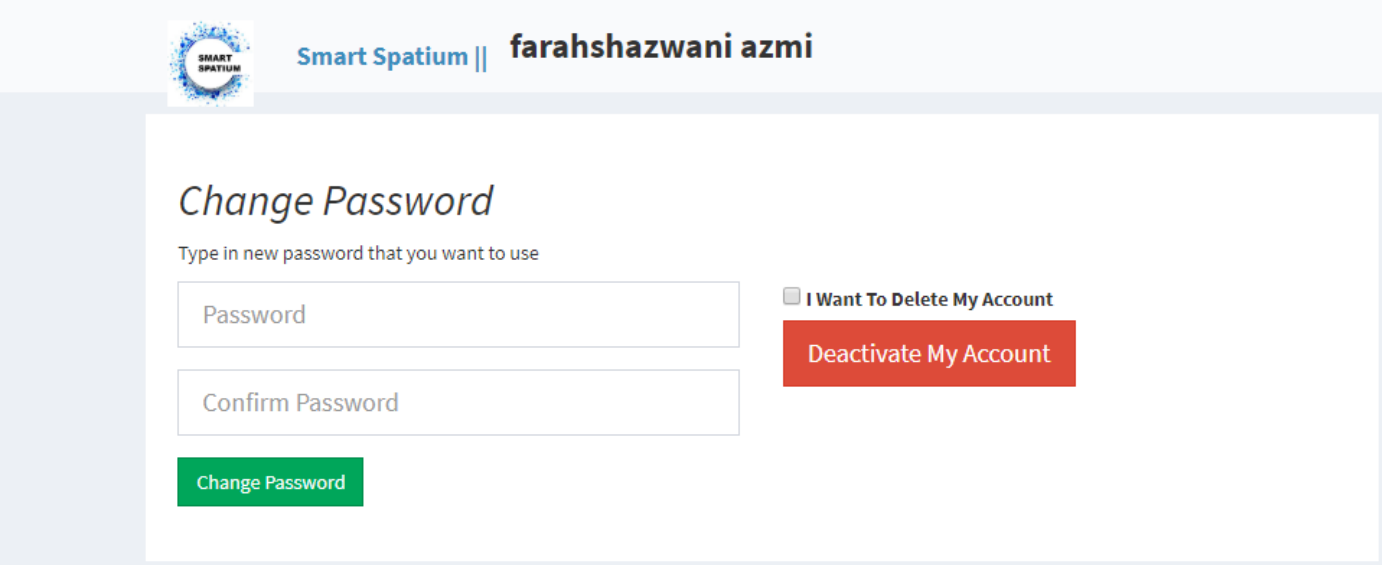
Delete Account Page:



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SMART SPATIUM SCREENSHOTS (25)

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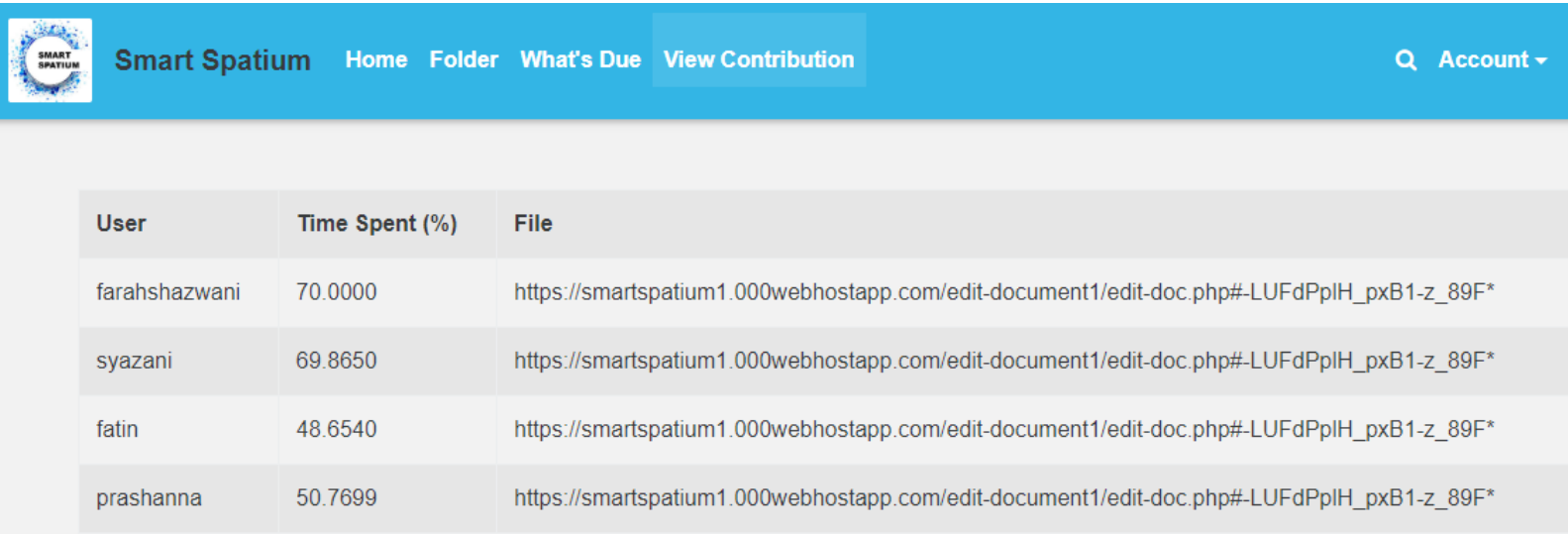
View Contribution Page:



User	Time Spent (%)	File
farahshazwani	70.0000	https://smartspatium1.000webhostapp.com/edit-document1/edit-doc.php#-LUFdPplH_pxB1-z_89F*
syazani	69.8650	https://smartspatium1.000webhostapp.com/edit-document1/edit-doc.php#-LUFdPplH_pxB1-z_89F*
fatin	48.6540	https://smartspatium1.000webhostapp.com/edit-document1/edit-doc.php#-LUFdPplH_pxB1-z_89F*
prashanna	50.7699	https://smartspatium1.000webhostapp.com/edit-document1/edit-doc.php#-LUFdPplH_pxB1-z_89F*

CONCLUSIONS

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- ✓ Smart Spatium also aims to instill and cultivate the sense of community belonging that encourages work responsibility, and smart teamwork coordination among team members while working on assignments or projects.
- ✓ It is a complementary to the existing system (which involves conventional classroom, physical meetings and manual assessments). For higher learning institutions such as university and colleges, this would be an added value that not only facilitates and simplifies the students' learning process but also the lecturers' teaching and its related tasks including assessment.
- ✓ From time to time, the existing practice in higher education will gradually embracing more dynamic and efficient trend in teaching and learning especially with new technologies supporting collaborative teamwork and unbiassed, objective assessment.
- ✓ Smart Spatium has recently been granted a copyright for its contribution especially to the ICT application for higher learning education area of interest.

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BERILMU BERBAKTI

TERIMA KASIH/*THANK YOU*

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