

50.003 Elements of Software Construction - Project Meeting 2

ISTD Cohort 1 Group 9 - Self-initiated Project: new SUTD Housing Portal

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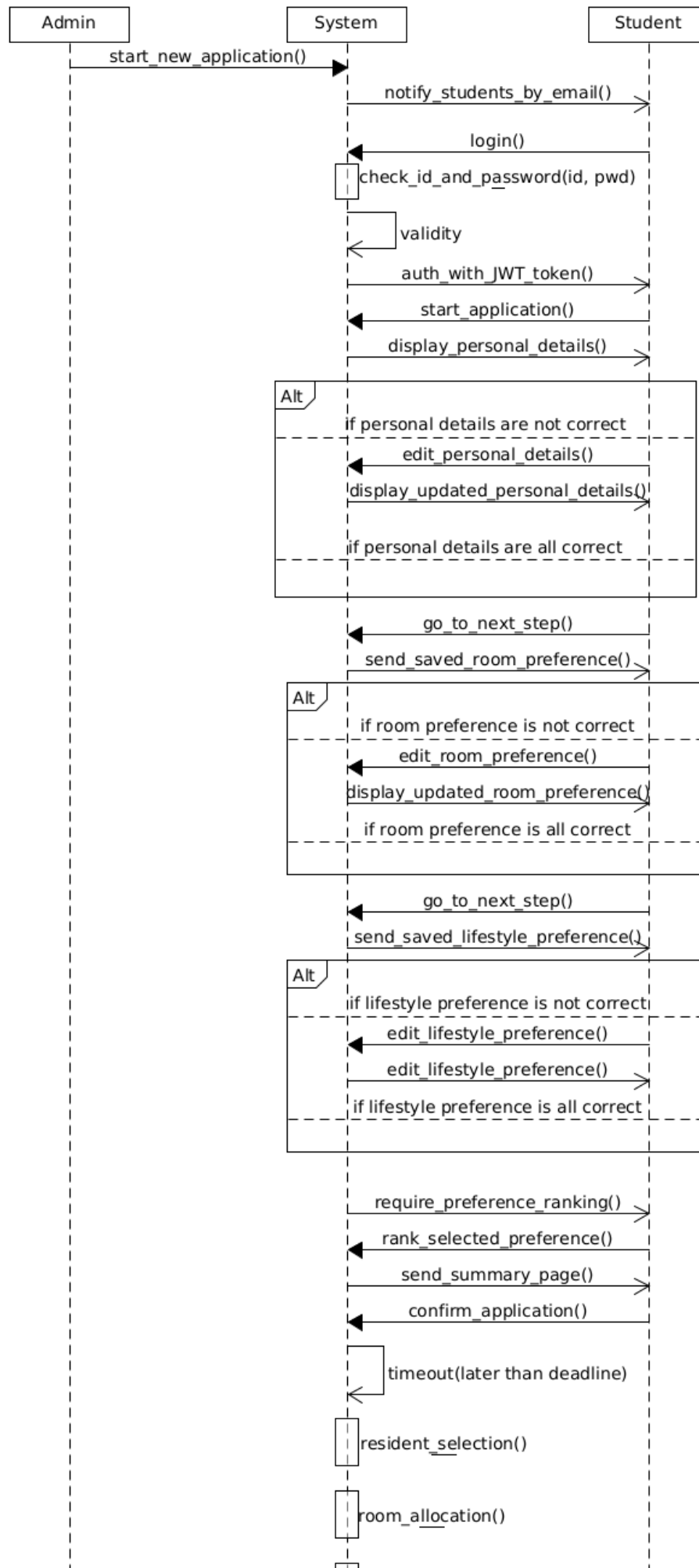
Refinement of Project Scope

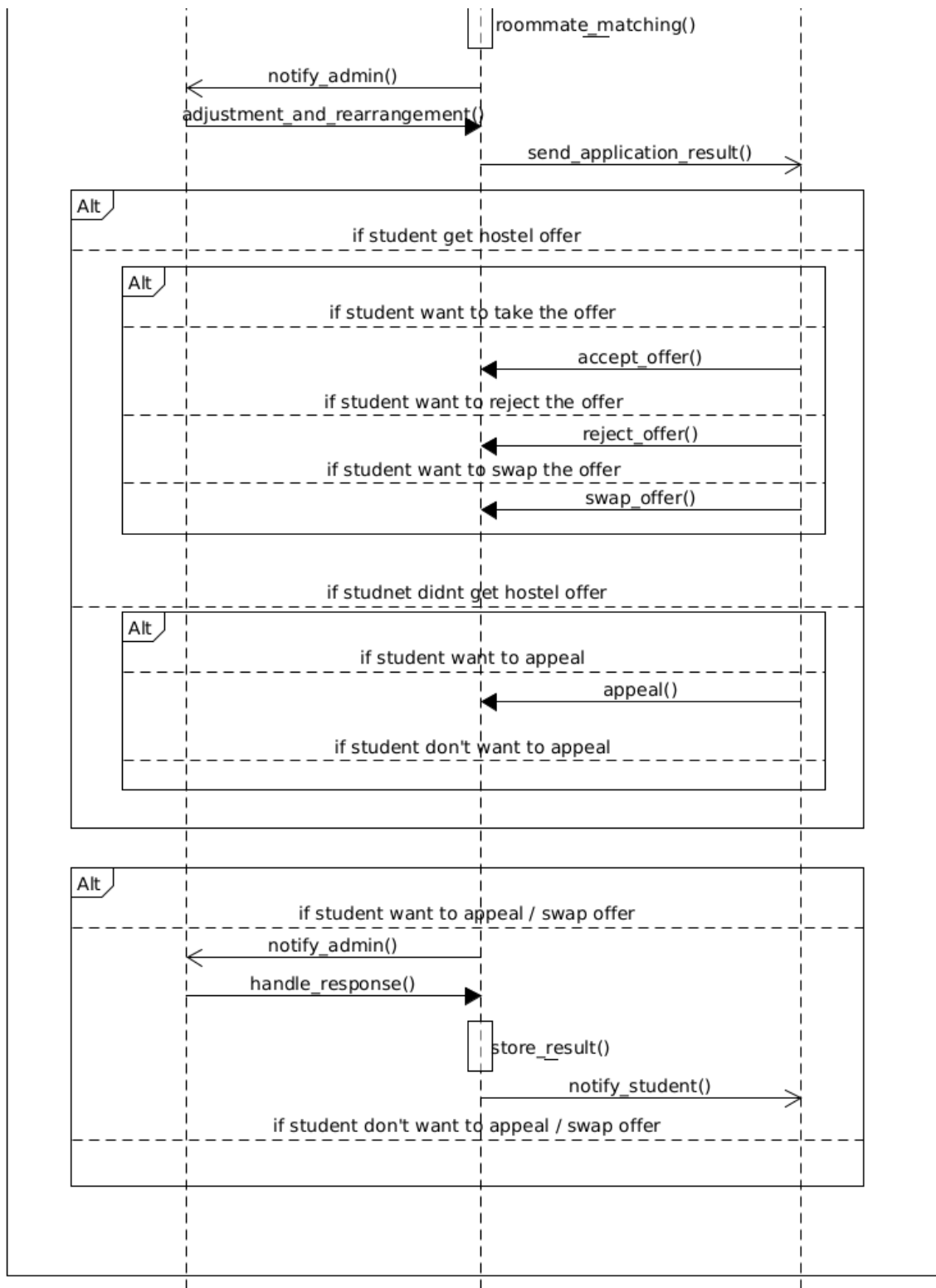
After extensive discussion done with Housing Staff, Office of Student Life, and some House Guardians, we have understand that their currently pain point is related to housing event scheduling, registration, and attendance tracking. Since housing event attendance is a major criteria in the housing application process, facilitate this process will also boost the efficiency of all parties involved. Hence, we have prioritized the features to support Housing event creation, registration, and attendance tracking. In addition, we need to take care of the new role "House Guardian" as a special type of student who can create events and see relevant resident information partially. We have since introduced a rough access control plan as follows:

- Housing Admin
 - Full privilege
 - Be able to read/write all information
 - Be able to import system data
 - Be able to create new Application Period
 - Be able to review/offer/reject housing applications
 - Be able to overwrite any user data
 - Be able to grant/revoke student's House-guardian privilege
 - Be able to check/create/update housing Events like a House Guardian
 - Read-only privilege
 - Be able to read all information only
- Student
 - Normal
 - Only see information relevant to self
 - Only be able to update non-sensitive personal information
 - Changing sensitive data (e.g. legal name, IC number, etc.) is NOT allowed.
 - House-guardian privilege
 - Be able to check partial student information on the floor managed by the user.
 - Be able to check/create/update housing Events.
 - Be able to log student attendance for Events.

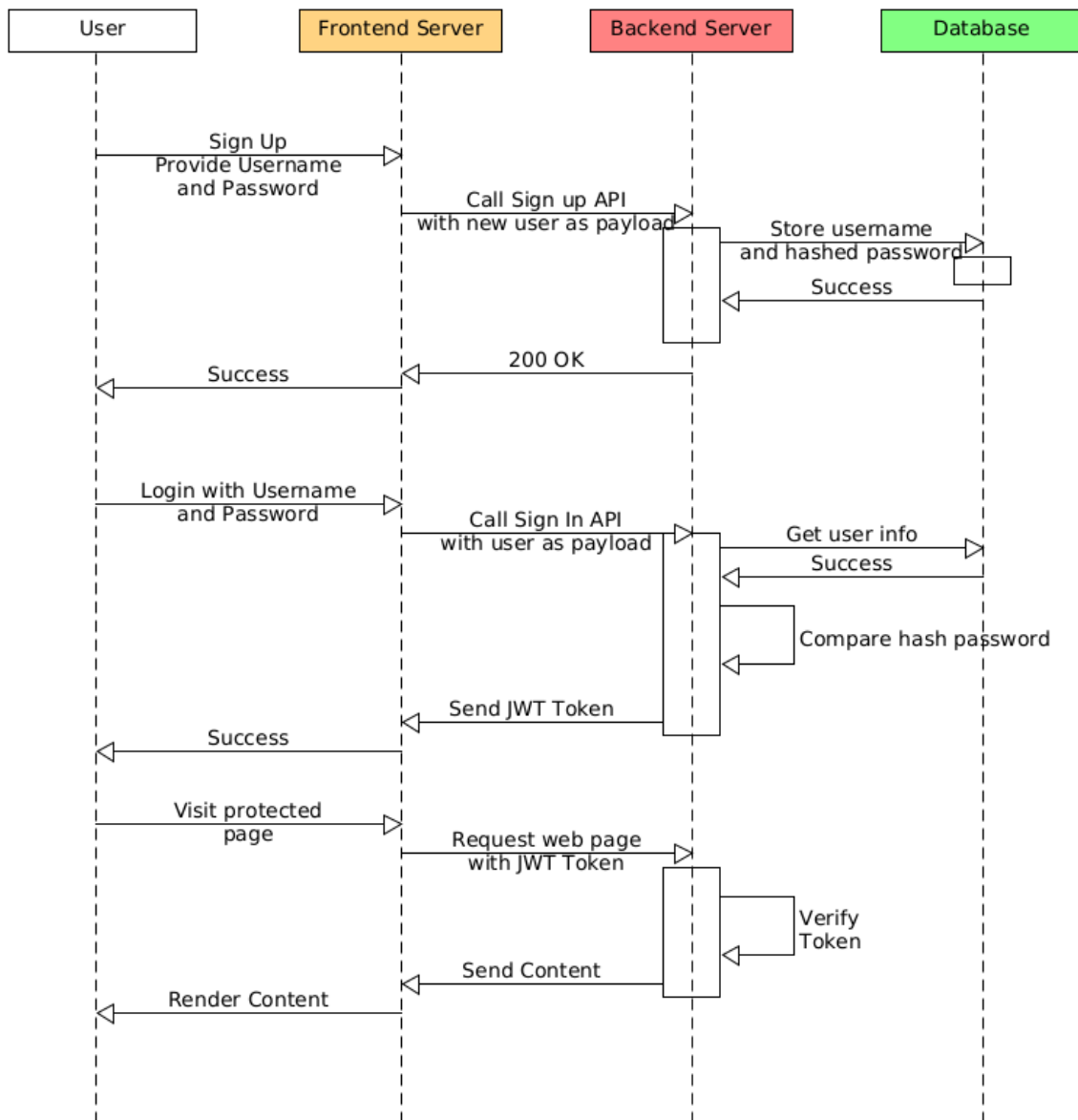
UML Use Case Diagram

Application Sequence Diagram





Key Sequence: JWT Authentication implementation

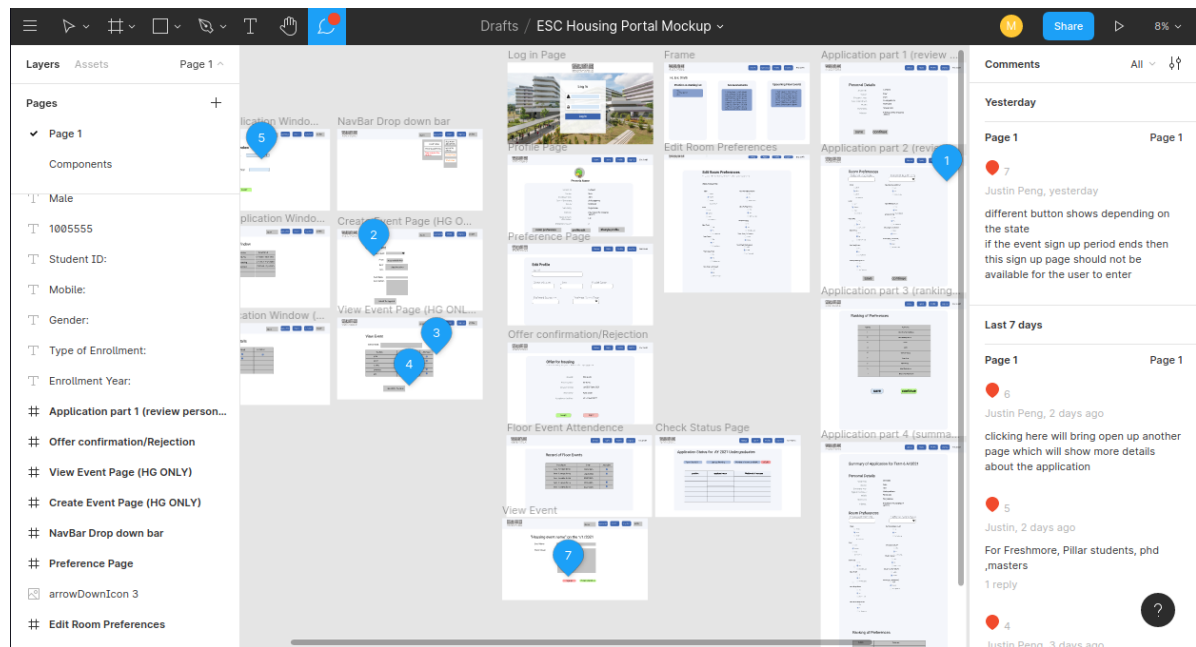


UML Class Diagram

POST	/register/user	Register	
POST	/register/admin	Register Admin	
POST	/register/student	Register Student	
POST	/login	Login	
GET	/users	Get All Users Info	🔒
GET	/students	Get All Student Info	🔒
GET	/students/{student_id}	Get Student Info	🔒
PUT	/students/{student_id}	Update Student Info	🔒
PUT	/students/{student_id}/set_hg	Set Student As Hg	🔒
PUT	/students/{student_id}/revoke_sg	Revoke Student As Hg	🔒
PUT	/students/{student_id}/update_room_profile	Update Room Profile	🔒
PUT	/students/{student_id}/update_lifestyle_profile	Update Lifestyle Profile	🔒
GET	/applications	Get All Applications	🔒
POST	/applications	Submit Application	🔒
GET	/applications/{uid}	Get An Application Info	🔒
PUT	/applications/{uid}	Update Application	🔒
DELETE	/applications/{uid}	Delete Application	🔒
POST	/applications/{uid}/offer	Approve Application	🔒
POST	/applications/{uid}/waitlist	Waitlist Application	🔒
POST	/applications/{uid}/reject	Reject Application	🔒
GET	/events	Get All Events	🔒
POST	/events	Create Event	🔒
GET	/events/{uid}	Get All Events	🔒
GET	/disciplinary_record	Get All Disciplinary Record	🔒
POST	/disciplinary_record	Add Disciplinary Record	🔒
GET	/disciplinary_record/{uid}	Get Disciplinary Record	🔒
PUT	/disciplinary_record/{uid}	Update Disciplinary Record	🔒
DELETE	/disciplinary_record/{uid}	Delete Disciplinary Record	🔒

Frontend Design & Current progress

- We have done a User Interface Design Mockup in Figma, this serves a visual aid for our app development such that everyone in the team can understand the features and user journey unambiguously.



- Some progress on Frontend development



Eric Smith

Student ID:	1005555	Gender:	Male
Enrollment Year:	2021	Type of Enrollment:	Undergraduate
Mobile:	98765432	Nationality:	Singaporean
Disciplinary Record:	0	Housing Event:	1/2
Address:	8 Somapah Rd, Singapore 487372		
Current Term:		Term 5	

[Edit Room Preference](#)
[Edit Personal Profile](#)
[Edit Lifestyle Profile](#)

Floor Events

	Name	Date	Time	Floor	Join!
▾	Paper Work DIY!	3-4-2021	17:00-19:00	All	Join Now!
▾	LEGO ARTIST	4-4-2021	20:00-22:00	59L11	Join Now!
▾	E-GAME ONLINE!	5-4-2021	14:00-16:00	59L11	Join Now!
▾	Basketball is fun!	6-4-2021	17:00-19:00	59L11	Join Now!
▾	Zen Zen Zen	7-4-2021	17:00-19:00	59L11	Join Now!

Testing Plan

- Unit Test
 - function-level white box testing
 - Tools
 - [pytest](#) framework
 - Python's [unittest](#) package
- Integration Test
 - API-level testing
 - UI level testing
 - docker deployment testing
 - Tools
 - [pytest](#), and Python's [subprocess](#)
 - [selenium](#)
- Non-functional Test
 - Stress Testing
 - Load Testing
 - Performance Testing
 - Tools
 - [Gatling](#)
 - Python

Commit History

At the early stage of development, we have experimented with different web frameworks, so the early works are fragmented at several different repositories.

Commit Message	Author	Date
create application manage component	Fattyboy9898	Today 4:00 下午
update application window component	Fattyboy9898	Today 3:58 下午
added create application window component	Fattyboy9898	Today 3:22 下午
update application part 1&2	JamesNolan17	Today 10:30 上午
create profile page	JamesNolan17	Yesterday 11:18 下午
create event history page	JamesNolan17	Yesterday 10:20 下午
create events page	JamesNolan17	Yesterday 4:38 下午
update login page	JamesNolan17	2/3/21, 6:43 下午
Init project with basic components & Nav bar	JamesNolan17	2/3/21, 12:36 下午
Initialize project using Create React App	JamesNolan17	1/3/21, 10:12 下午

update api
 gzyon committed 3 hours ago

added classes LifestyleProfile, AcademicRecords
 gzyon committed 4 hours ago

added event class
 gzyon committed 4 hours ago

Commits on Feb 27, 2021

Update
 MarkHershey committed 6 days ago

Commits on Feb 26, 2021

Update settings.py
 MarkHershey committed 7 days ago

Add basic api
 MarkHershey committed 7 days ago

Current Merged Project Repository: <https://github.com/MarkHershey/SUTDHousingPortal>