

# Effort Estimation and Scheduling

TakuMahi Evidence Review Three

First, a review of our  
management spreadsheet.

# Release Plan

Here we have laid out the schedule for the release. We have three two week sprints, roughly estimated at the same size.

Sprint Plan								
Sprint	Start	Days	End	Size	Status	Release Date	Goal	Increment
1	5/04/2021	14	18/04/2021	58	Planned	18/04/2021	Create Base fuctions and Support	1
2	19/04/2021	14	2/05/2021	66	Planned	2/05/2021	Complete Fundamentals	2
3	3/05/2021	14	16/05/2021	65	Planned	16/05/2021	Add extra features	3
Unallocated stories				0				

# Product Backlog

Story ID	Story name	Status	Size	Sprint	Priority	Comments
24	DAO	Ongoing	8	1	Must	Create the DAO for the Java Application
25	Domain	Ongoing	8	1	Must	Create the Domain classes for the Java Application
26	Resource / API	Ongoing	10	1	Must	Create the API and Java Resource classes.
2	Interface App design	Ongoing	3	1	Must	Users wants the design of the app to follow the Otago Un
14	Login	Ongoing	3	1	Must	Users must be logged in to the service to access the functi
16	Calendar and Roster viewer	Ongoing	13	1	Must	Users should be able to access the calendar and upcoming
9	Multi-factor Authentication	Ongoing	3	1	Must	Users will need to be verified using their staff ID and pin t
22	Tagging of roles on the employees	Ongoing	2	1	Should	Roles of the employee will be tagged in their ID
20	Account Creation	Ongoing	5	1	Must	Users with manager permissions should be able to create
21	Account Deletion	Ongoing	3	1	Must	Users with manager permissions should be able to delete
3	Assigning Shifts	Planned	13	2	Must	Users with manager permissions should be able to assign
4	Hours Selection	Planned	13	2	Must	Employees are able to select which hours they are availa
5	View Open Shifts	Planned	8	2	Should	Employees should be able to view and apply for available
8	Checking availability of employee	Planned	3	2	Must	Users with manager permissions should be able to view tl
10	mobile support	Planned	5	2	Must	Users should be able to use the system on mobile device
12	view shifts	Planned	3	2	Must	Employees and management should have the ability to vie
17	Notifcation system	Planned	13	2	Should	People should be notified if someone wants to alter their :
18	Record of hours of each individuals	Planned	3	2	Should	Employees are able to see the report on how many hours
19	Record of total hours	Planned	3	2	Must	Managers are able to see the summarised report on how
23	Filter by roles	Planned	2	2	Should	View shifts by role. Only people with the selected role wil
1	Clocking In&Out	Planned	21	3	Could	Employees should be able to clock in and out of their shift
6	Request Shift Swap	Planned	21	3	Should	Employees should be able to create Shift Swap requests.
7	Shift Swap Approval	Planned	5	3	Should	Managers will have to approve all Open Shifts/Shift Swap
11	Recieve shifts	Planned	2	3	Could	Employees should be emailed out a shift
13	User guide	Planned	3	3	Could	New users are able to refer to the user guide on how to u
15	Calendar Export	Planned	13	3	Could	Users should be able to export their roster to a third-party

# Burndown

## Product Backlog Burndown Chart

Original planned size 189  
Count trend from last 3 sprints

### Velocity (points per sprint)

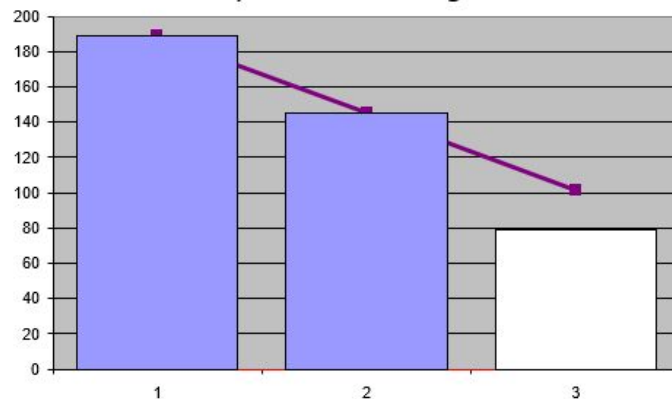
Original estimate 30  
Last 3 sprints 44.0  
Realized total average 44.0  
Average last 8 44.0  
Avg. worst 3 in last 8 44.0  
Trend 44.0

### Predictions - Completion at the end of sprint...

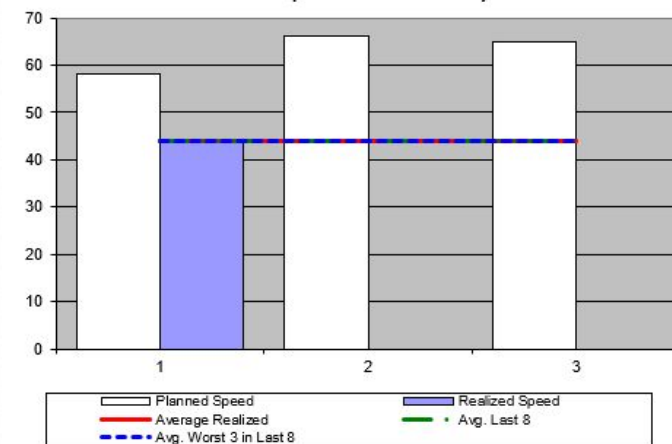
Original estimate - Min 4  
Original estimate - Avg 7  
Original estimate - Max 11  
Last 3 sprints 4  
Realized average 4  
Average last 8 4  
Avg. worst 3 in last 8 4  
Trend 2  
Realized + St. Dev 4  
Realized - St. Dev 4

Sprint	Remain. Work	Planned Work	Realized Work	Current Total Size
1	189	58	44	189
2	145	66		189
3	79	65		189

## Velocity and Remaining Work



## Development Velocity

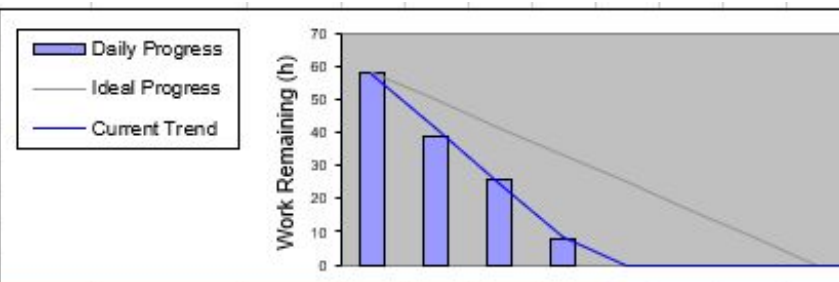


# Sprint One

## Sprint 1 Backlog

Sort Sprint Tasks

Update Task Slips

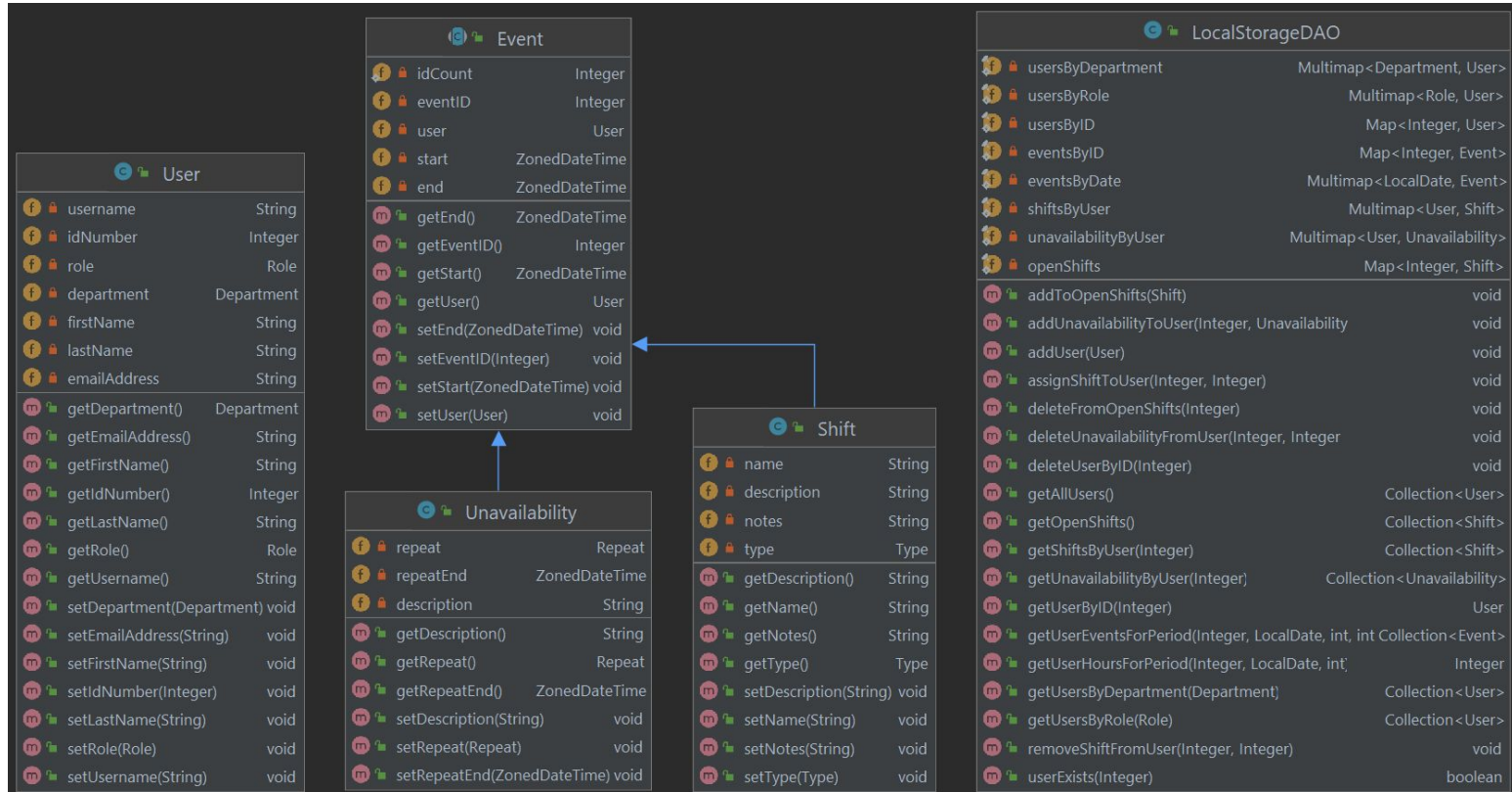


Sprint implementation days		7			Effort	Remaining on implementation day...						
Trend calculated based on last		7	Days	Totals	58	58	39	26	8			
Task name	Story ID	Responsible	Status	Est.	1	2	3	4	5	6	7	
Interface App design	2	Caleb	Ongoing	3	3	1	1	1				
Multi-factor Authentication	9	Caleb	Done	3	3	0						
Login	14	Caleb	Ongoing	3	3	2	2	1				
Calendar and Roster viewer	16	Leo	Ongoing	13	13	13	12	3				
Account Creation	20	Seu	Done	5	5	0						
Account Deletion	21	Seu	Ongoing	3	3	3	3	3				
Tagging of roles on the employees	22	Seu	Done	2	2	0						
DAO	24	Tommy	Ongoing	8	8	8	2					
Domain	25	Tommy	Done	8	8	2	0					
Resource / API	26	Keiran	Ongoing	10	10	10	6					





# Domain Classes & Data Access Object





# Resource Classes and API

- Created Open API Specification
- Resource Classes for Staff List, Staff, and Staff filtered by Role
- Can now run HTTP requests for Resource Classes - Examples Next Slide
- Tasks Remaining:
  - Create API paths for Staff Unavailabilities and Shifts in a Period
  - Implement Resource Classes for Shift related services
  - Automated tests to ensure all services work as expected

# Resource Classes and API - HTTP Examples

## GET Request Staff List

Server response

Code Details

200

Response body

```

{
  "users": [
    {
      "id": "User1",
      "password": "1234",
      "role": "Manager",
      "department": "StudentIT",
      "username": "User",
      "password": "One"
    },
    {
      "id": "User2",
      "password": "12345",
      "role": "Manager",
      "department": "GeneralEnquiries",
      "username": "User",
      "password": "Two"
    },
    {
      "id": "User3",
      "password": "12346",
      "role": "Casual",
      "department": "AskIT",
      "username": "User",
      "password": "Three"
    }
  ]
}
```

Response headers

```

connection: keep-alive
content-length: 352
content-type: application/json;charset=UTF-8
```

Download

## GET Request filtered by Role

Request URL

`http://localhost:8080/api/staff/role/Manager`

Server response

Code Details

200

Response body

```

{
  "users": [
    {
      "id": "User2",
      "password": "12345",
      "role": "Manager",
      "department": "GeneralEnquiries",
      "username": "User",
      "password": "Two"
    },
    {
      "id": "User1",
      "password": "1234",
      "role": "Manager",
      "department": "StudentIT",
      "username": "User",
      "password": "One"
    }
  ]
}
```

Response headers

```

connection: keep-alive
content-length: 239
content-type: application/json;charset=UTF-8
```

Download

## View shifts

- Created the necessary front end for a user to be able to view their shifts in a weekly or daily view.
- Currently the calendar doesn't process or display data but we plan to update this in the next sprint when we will have the necessary dependencies completed.
- The buttons on the top right allow you to select how you'd like to view the data though currently do not work as we are waiting for the dependencies on this as well.
- The calendar still needs to have its style changed to match the rest of the site And some kind of save button.



# View Shifts Screenshots - Continued

☐ Day ☐ Week ☒ Month

Next

Previous

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
01	02	03	04	05	06	07
08	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

# Login Page

TakuMahi | MyWork



**Username**

**Password**

**2FA**

Login

Remember Details



[Forgot Password?](#)

[Need An Account?](#)

# Login Page Continued...

**Username**

Wick..John

**Password**

.....

**2FA**

2FA

Login



Remember My Details

[Forgot P](#)



Please fill in this field.



# Website Design



Home

Calendar

Create An  
Account



TakuMahi | MyWork

**Username**

**Password**

**2FA**

[Login](#)

Remember Details ☒

[Forgot Password?](#) [Need An Account?](#)



AskOtago | Uia Ōtākou

## Log in to AskOtago

University of Otago staff and students



Log in using your University of Otago username

# Create An Account Page

TakuMahi | MyWork

Account Details

Staff ID:

8099548

First Name:

Seu Wand

Last Name:

Tee

Staff Email:

PIN:

Phone Number:

Department:

Roles:

Create Account

# Delete Account Page

TakuMahi | MyWork

Delete Account

Staff ID:

8099548

x

Search Account

Staff ID:	First Name:	Last Name:
-----------	-------------	------------

8099548	Seu Wand	Tee
---------	----------	-----

Delete

Thank you for your attention.

Are there any questions at this time?