

COMP3111

Software Engineering Team Project

Course Scraper

Activity 2 Submissions

Team Code	T-24
Team Members	CHONG Cheuk Hei (Tasks 1 & 5) LAW Kai Yuet (Tasks 2 & 3) LI Lok Yin (Tasks 4 & 6)

Sample Inputs and Outputs

Task 1: Backend

Courses scraped: COMP courses from Term 1910 without filtering

Team T-24: Course Scraper

Main

Backend

Filter

List

Timetable

All Subject Search

SFQ

Base URL

Term

Subject

Search

Please note that during grading we will save the Base URL into another site and manually edit some data. Don't hardcode

Console

COMP 1001 - Exploring Multimedia and Internet Computing (3 units)
Slot 0:We15:00-16:50:Rm 5620, Lift 31-32 (70)
L1 (1782)
Slot 1:Th16:00-17:50:Rm 4210, Lift 19 (67)
LA1 (1783)

COMP 1021 - Introduction to Computer Science (3 units)
Slot 0:Mo12:00-12:50:Rm 2306, Lift 17-18 (111)
L1 (1784)
Slot 1:We12:00-12:50:Rm 2306, Lift 17-18 (111)
L1 (1784)
Slot 2:We16:30-17:20:Lecture Theater F (134)
L2 (1786)
Slot 3:Fr16:30-17:20:Lecture Theater F (134)
L2 (1786)
Slot 4:We15:00-15:50:Rm 2306, Lift 17-18 (111)
L3 (1788)
Slot 5:Fr15:00-15:50:Rm 2306, Lift 17-18 (111)
L3 (1788)

Task 2: Filter

Courses scraped: COMP courses from Term 1910

Team T-24: Course Scraper

Main

Backend

Filter

List

Timetable

All Subject Search

SFQ

Select All

☒ AM

☒ PM

☒ Monday

☐ Tuesday

☐ Wednesday

☐ Thursday

☒ Friday

☐ Saturday

☒ Common Core

☐ No Exclusion

☒ With Labs or Tutorial

A course has a section at that time/on that day. A section can be lecture/tutorial/lab. Click AM + Monday does not imply a course has a section on Monday morning. It means there is a section in the morning, but that section may not be on Monday. However, that course must have another Monday section.

Common Core refers to 4Y CC; No Exclusion refers to a course does not has any exclusion. Information can be founded on the pop-up text of the "COURSE INFO"

The section code of a Lab must begins with LA, tutorial must begins with T. Code begins with R can be ignored.

* When the filter is applied, display all sections that fulfill all of these conditions; Print them to the console below on any change of checkbox

Console

Displaying filtered courses:

COMP 2711 - Discrete Mathematical Tools for Computer Science (4 units)
Section L3 (1880) Instructor: PAPADOPOULOS, Dimitris
Slot 1 Mo13:30-14:50:Rm 4619, Lift 31-32 (126)
Slot 2 Fr09:00-10:20:Rm 4619, Lift 31-32 (126)

Task 3: List

Courses scrapped: HUMA courses from Term 1910

Courses enrolled: COMP3111 L2 from Term 1910 (from a previous search)

Filters applied: AM, PM, Monday, Common Core

Team T-24: Course Scraper

MainBackendFilterListTimetableAll Subject SearchSFQ

Course Code	Section	Course Name	Instructor	Enroll
HUMA 1000A	T11	Cultures and Values: Language, Communication...	FUNG, John PUN, Wing Man Winnie	<input type="checkbox"/>
HUMA 1000A	T12	Cultures and Values: Language, Communication...	FUNG, John PUN, Wing Man Winnie	<input type="checkbox"/>
HUMA 1000B	T19	Cultures and Values: Righteousness, Destiny an...	SAMPSON, Nicholas TSANG, Perseus	<input type="checkbox"/>
HUMA 1000B	T20	Cultures and Values: Righteousness, Destiny an...	SAMPSON, Nicholas TSANG, Perseus	<input checked="" type="checkbox"/>
HUMA 1000E	L1	Cultures and Values: Freedom, Justice, and the ...	LAU, Chun Hong NELSON, Eric S	<input type="checkbox"/>

*Fill the table according to the result of the Filter. If the Filter cannot be correctly implemented, show all result scrapped.
All column are uneditable except Enroll. Each row in Enroll should contains a check box for user to enroll/unenroll a course

Console

The following sections are enrolled:

COMP 3111 - Software Engineering (4 units)
Section L2 (1897) Instructor: LEUNG, Wai Ting
Slot 1 Tu12:00-13:20:Rm 2502, Lift 25-26 (120)
Slot 2 Th12:00-13:20:Rm 2502, Lift 25-26 (120)

HUMA 1000B - Cultures and Values: Righteousness, Destiny and Well-being (3 units)
Section T20 (2362) Instructor: SAMPSON, Nicholas, TSANG, Perseus
Slot 1 Mo11:30-13:20:TBA

Displaying filtered courses:

HUMA 1000A - Cultures and Values: Language, Communication and Society (3 units)
Section T11 (2330) Instructor: FUNG, John, PUN, Wing Man Winnie
Slot 1 Tu12:00-13:20:Rm 2502, Lift 25-26 (120)

Task 4: Timetable

Courses enrolled: COMP2611 L1 (Mo 1330-1450, Fr 0900-1020), COMP2611 T1 (Mo 0930-1020),
 COMP2611 LA2 (Fr 1330-1420), COMP2012 L2 (WeFr 1500-1620),
 COMP2012 LA1 (Th 1030-1220) overlaps with MATH1013 L07 (TuTh 1200-1320)

Team T-24: Course Scraper

Main
Backend
Filter
List
Timetable
All Subject Search
SFQ

Display all enrolled courses as a box (see example in the demo program). Boxes contain course code only. They can be overlapped.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
0900					COMP 2611 L1	
1000	COMP 2611 T1					
1100				COMP 2012 LA1		
1200		MATH 1013 L07		MATH 1013 L07		
1300						
1400	COMP 2611 L1				COMP 2611 LA2	
1500			COMP 2012 L2		COMP 2012 L2	
1600						
1700						
1800						
1900						
2000						
2100						
2200						

Console

The following sections are enrolled:

COMP 2611 - Computer Organization (4 units)
 Section L1 (1866) Instructor: LAM, Ngok
 Slot 1 Mo13:30-14:50:Rm 2302, Lift 17-18 (74)
 Slot 2 Fr09:00-10:20:Rm 2302, Lift 17-18 (74)

COMP 2611 - Computer Organization (4 units)
 Section T1 (1873) Instructor: LAM, Ngok, Li, Xin
 Slot 1 Mo09:30-10:20:Rm 5583, Lift 29-30 (80)

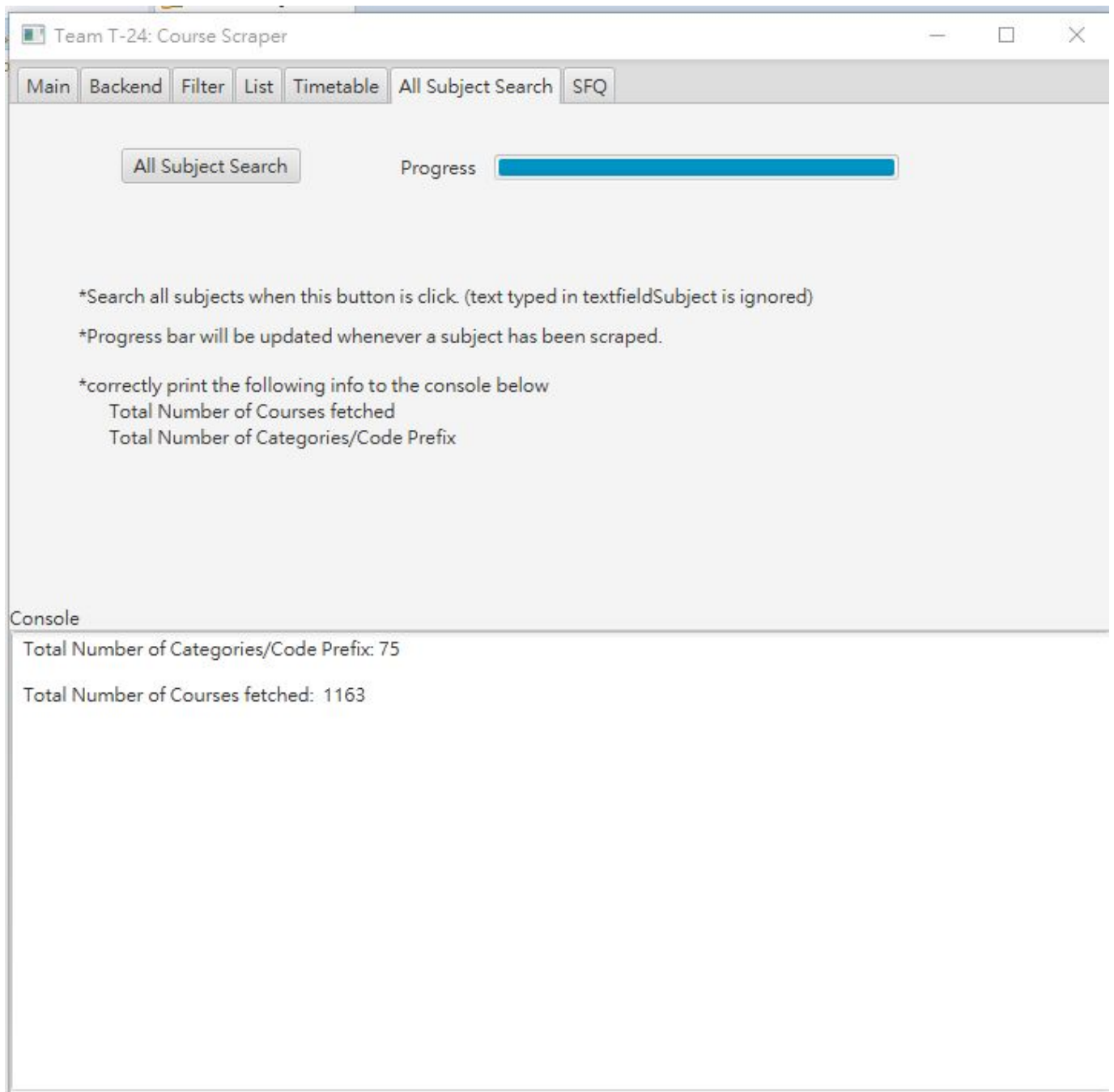
COMP 2012 - Object-Oriented Programming and Data Structures (4 units)
 Section L2 (1858) Instructor: TSOI, Yau Chat
 Slot 1 We15:00-16:20:Rm 2407, Lift 17-18 (126)
 Slot 2 Fr15:00-16:20:Rm 2407, Lift 17-18 (126)

COMP 2012 - Object-Oriented Programming and Data Structures (4 units)

Task 5: All Subject Search

Subject scraped: ALL subjects available from Term 1910

Courses scraped: ALL courses from Term 1910



Tash 6: SFQ

Courses Enrolled: COMP2611 L1, COMP2012 L2, MECH1907 L1, ELEC1100 L2, COMP2012 LA3

SFQ URL: Local eng-f19.html file for testing (obtained from the SFQ website)

Action: Pressed Button "Find SFQ with my enrolled courses"

Team T-24: Course Scraper

Main

Backend

Filter

List

Timetable

All Subject Search

SFQ

SFQ URL:

Find SFQ with my enrolled courses

List instructors' average SFQ

You may assume no login is required when you scrape the SFQ page

When Find SFQ button is clicked, unadjusted SFQ data will be printed (not the data inside []). If a course has multiple section,s only the course average is needed.

When List instructors average button is clicked, all unadjusted SFQ data of sections taught by an instructor will be added and divided by the number of sections he/she taught. Thus, there is no need to consider the number of students. We assume there will be no lab/tutorial section on this page.

Console

Course	(Average) SFQ Score
COMP 2012	79.5
COMP 2611	81.6
ELEC 1100	80.6667
MECH 1907	88.8

Action: Pressed Button "List Instructors' average SFQ"

Team T-24: Course Scraper

Main

Backend

Filter

List

Timetable

All Subject Search

SFQ

SFQ URL

file:\\C:\\Users\\User\\git\\comp-3111-project\\src\\main\\resources\\eng-f19.f

Find SFQ with my enrolled courses

List instructors' average SFQ

You may assume no login is required when you scrape the SFQ page

When Find SFQ button is clicked, unadjusted SFQ data will be printed (not the data inside []). If a course has multiple section,s only the course average is needed.

When List instructors average button is clicked, all unadjusted SFQ data of sections taught by an instructor will be added and divided by the number of sections he/she taught. Thus, there is no need to consider the number of students. We assume there will be no lab/tutorial section on this page.

Console

Instructor	(Average) SFQ Score
LAM, Henry H N	83.05
KUANG, Becki Yi	83.3
WONG, Tsz Wai	96.9
SEMMEHACK, Julie	82.8
WANG, Jiguang	83.3
CHAU, Ying	70.0
SUN, Fei	60.5
LAKERVELD, Richard	80.6
LUO, Zhengtang	70.7
GAO, Ping	79.3
LIU Yuan Shuai	86.45
Frank L Y Lam	87.5
HUI, Chi Wai	75.0
HSING, I-ming	85.0
HU, Xijun	58.3
MI, Yongli	75.0

Minutes of the 1st Project Meeting

Date: 19 April 2020
Time: 15:30
Venue: Zoom meeting
Attendees: Thomas Chong, Ian Law, Justin Li
Secretary: Ian Law

1. Progress report

Name	Tasks	Total hours
Thomas Chong	<ul style="list-style-type: none">Studied Scraper classDrafted a set of entity classes	3
Ian Law	<ul style="list-style-type: none">Captured clarified user requirements (specifically about course-filtering) on TelegramRevised system requirement specifications	2
Justin Li	<ul style="list-style-type: none">Studied Scraper classStudied SFQ Survey Website structure	3

2. Discussions of impediments and resolutions

- Thomas, Ian and Justin all expressed their difficulties in focusing on the Project in the coming 2 weeks due to increased workload from other courses and extracurricular competitions. The team agreed on more relaxed goals for the time being.
- Ian expressed his concern over the team's risk of falling behind the schedule due to the relaxed development goals. The team agreed to adopt pair programming starting from the next meeting.

3. Upcoming goals

Name	Tasks
Thomas Chong	<ul style="list-style-type: none">Complete the implementation of Section classDraft the skeleton for the Instructor class and the modified Course class
Ian Law	<ul style="list-style-type: none">Draft the skeleton for a control class for filteringStudy Controller class for manipulating UI elements
Justin Li	<ul style="list-style-type: none">Draft the skeleton for SFQScraper method in Scraper class

4. Meeting adjournment and next meeting

There being no other businesses. The meeting adjourned at 16:10. The next meeting will be scheduled on 4 May at 20:00.

Minutes of the 2nd Project Meeting

Date: 4 May 2020
Time: 20:00
Venue: Skype meeting
Attendees: Thomas Chong, Ian Law, Justin Li
Secretary: Ian Law

1. Progress report

Name	Tasks	Total hours
Thomas Chong	<ul style="list-style-type: none">Completed the implementation of Section classDrafted the skeleton for the Instructor class and the modified Course classDrafted a part of the skeleton for SubjectScraper method in Scraper classImplemented sample code for manipulating Backend and All Subject Search tab in Controller class	6
Ian Law	<ul style="list-style-type: none">Drafted the skeleton for a control class for filteringStudied Controller class for manipulating UI elementsImplemented sample code for manipulating Filter and List tab in Controller classExpanded Scrape method's functionality in Scraper class	9
Justin Li	<ul style="list-style-type: none">Drafted a part of the skeleton for SFQScraper method in Scraper classCompleted a part of a control class for timetableImplemented sample code for manipulating SFQ and Timetable tab in Controller class	7

2. Discussions of impediments and resolutions

- Justin reported difficulties in fetching <tr> HTML elements in Scraper class. Ian and Thomas agreed to do peer programming with Justin after the meeting to help implement his SFQScraper method.
- Thomas reported difficulties in understanding the added user requirements in the Telegram. Ian agreed to serve as a "translator" to capture the project sponsor's requirements and parse them into implementation-faced "template" languages for easier understanding.
- Per last meeting's request, pair programming would be adopted after this meeting to accelerate our progress.

3. Upcoming goals

Name	Tasks
Thomas Chong	<ul style="list-style-type: none">• Complete the implementation of all functionalities in the Backend tab• Complete the implementation of all functionalities in the All Subject Search tab
Ian Law	<ul style="list-style-type: none">• Complete the implementation of all functionalities in the Filter tab• Complete the implementation of all functionalities in the List tab
Justin Li	<ul style="list-style-type: none">• Complete the implementation of all functionalities in the SFQ tab• Complete the implementation of all functionalities in the Timetable tab

4. Meeting adjournment and next meeting

There being no other businesses. The meeting adjourned at 21:15. The next meeting will be scheduled on 7 May at 22:00.

Minutes of the 3rd Project Meeting

Date: 7 May 2020
Time: 22:00
Venue: Skype meeting
Attendees: Thomas Chong, Ian Law, Justin Li
Secretary: Ian Law

1. Progress report

Name	Tasks	Total hours
Thomas Chong	<ul style="list-style-type: none">Completed the implementation of all functionalities in the Backend tabCompleted the implementation of all functionalities in the All Subject Search tab	12
Ian Law	<ul style="list-style-type: none">Completed the implementation of all functionalities in the Filter tabCompleted the implementation of all functionalities in the List tabCompleted the documentation of all responsible tasks	17
Justin Li	<ul style="list-style-type: none">Completed the implementation of all functionalities in the SFQ tabCompleted the implementation of all functionalities in the Timetable tabCompleted a part of the documentation of responsible tasks	14

2. Discussions of impediments and resolutions

- Thomas expressed his difficulty documenting his tasks due to the approaching deadlines from other courses. He has agreed to finish his documentation by 9 May, after his deadline.

3. Upcoming goals

Name	Tasks
Thomas Chong	<ul style="list-style-type: none">Complete the implementation of all functionalities in the Backend tabComplete the implementation of all functionalities in the All Subject Search tab
Ian Law	<ul style="list-style-type: none">Complete the implementation of all functionalities in the Filter tabComplete the implementation of all functionalities in the List tab
Justin Li	<ul style="list-style-type: none">Complete the implementation of all functionalities in the SFQ tabComplete the implementation of all functionalities in the Timetable tab

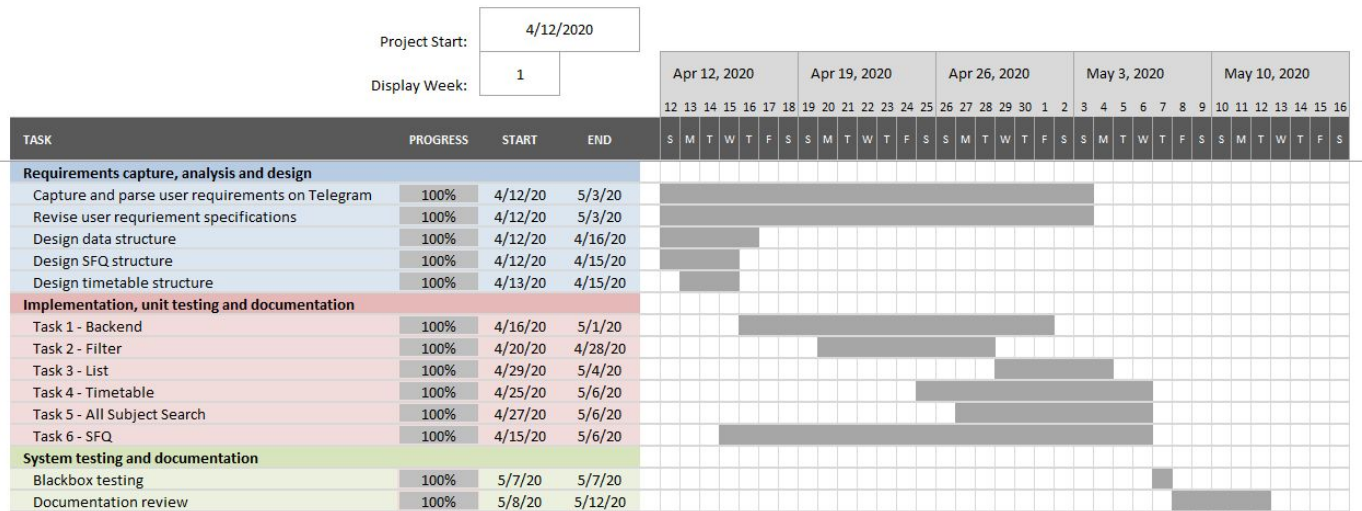
4. Meeting adjournment and next meeting

There being no other businesses. The meeting adjourned at 21:15.

Burndown Charts and Gantt Charts

Project Gantt Chart

COMP3111 Project: Course Scraper



Thomas Chong's Burndown Chart and Gantt Chart

Burndown Chart

Typical Student

COMP 3111: Sprint 2 Backlog and Burndown Chart

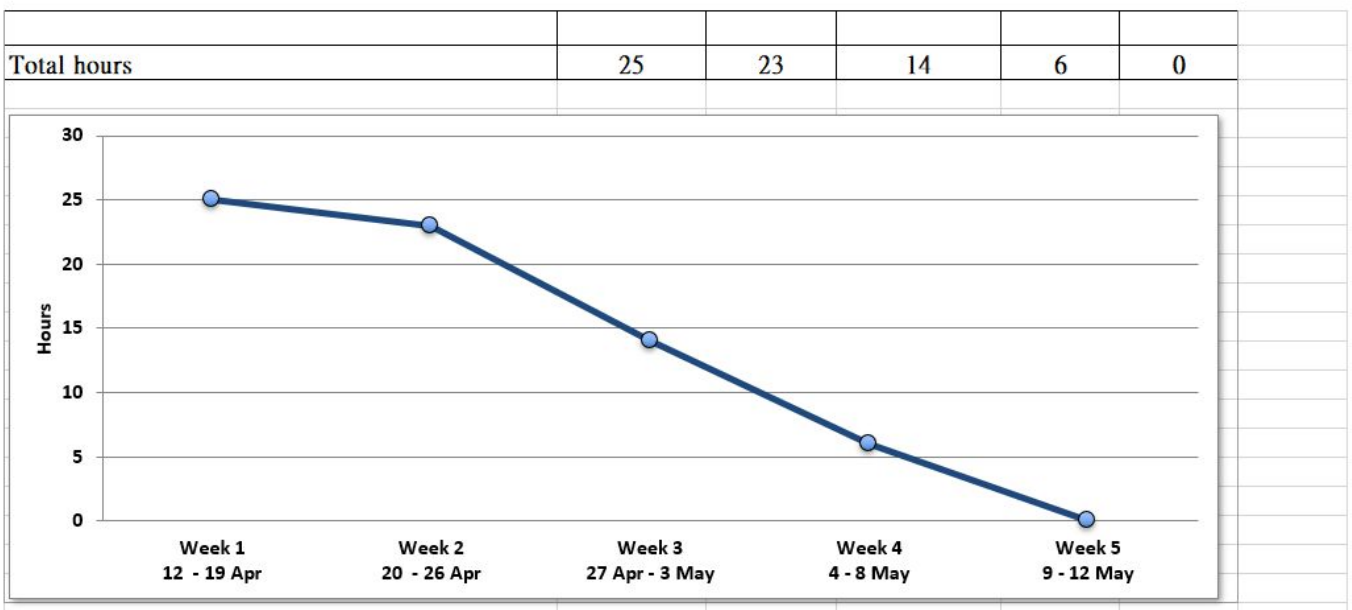
Student Id: 20600648

Sprint Tasks (Sprint Backlog)	Week 1 12 - 19 Apr	Week 2 20 - 26 Apr	Week 3 27 Apr - 3 May	Week 4 4 - 8 May	Week 5 9 - 12 May
Understand and capture the user requirement	1	0	0	0	0
Design data structure	1	0	0	0	0
Implement data structure	2	2	0	0	0
Study Scraper class used function in the skeleton code	2	2	0	0	0
Modify Scraper class to get more information for class	2	2	0	0	0
Implement Search button function	3	3	0	0	0
Implement All Subject Search First Click	4	4	4	0	0
Implement All Subject Search Second Click	2	2	2	0	0
Unit Testing on Search related functionalities	2	2	2	0	0
Unit Testing on All Subject Search related functionalities	2	2	2	2	0
Documentation on Search related functionalities	2	2	2	2	0
Documentation on All Subject Search related functionalities	2	2	2	2	0

Typical Student

COMP 3111: Sprint 2 Backlog and Burndown Chart

Student Id: 20600648

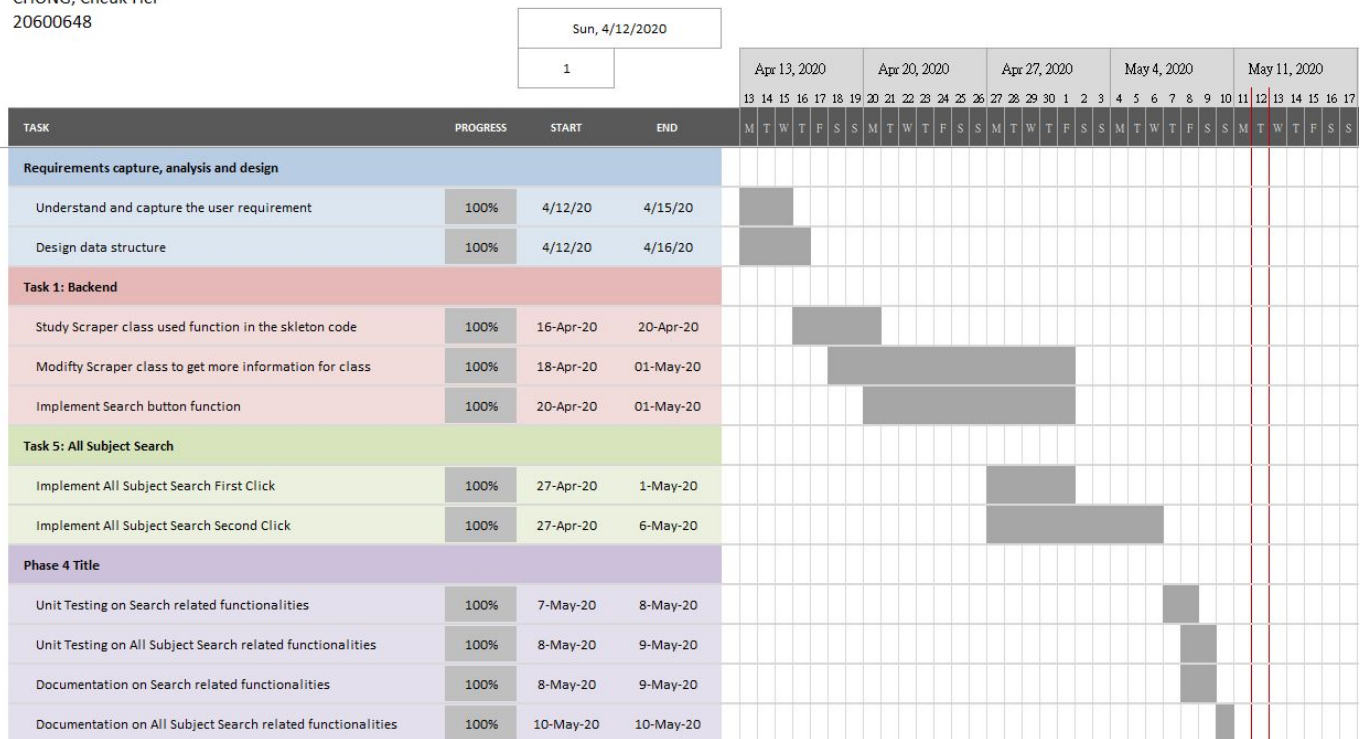


Gantt Chart

COMP3111 Project: Course Scraper

CHONG, Cheuk Hei
20600648

SIMPLE GANTT CHART by Vertex42.com
<https://www.vertex42.com/ExcelTemplates/simple-gantt-chart.html>



Ian Law's Burndown Chart and Gantt Chart

Burndown Chart

Typical Student

COMP 3111: Sprint 2 Backlog and Burndown Chart

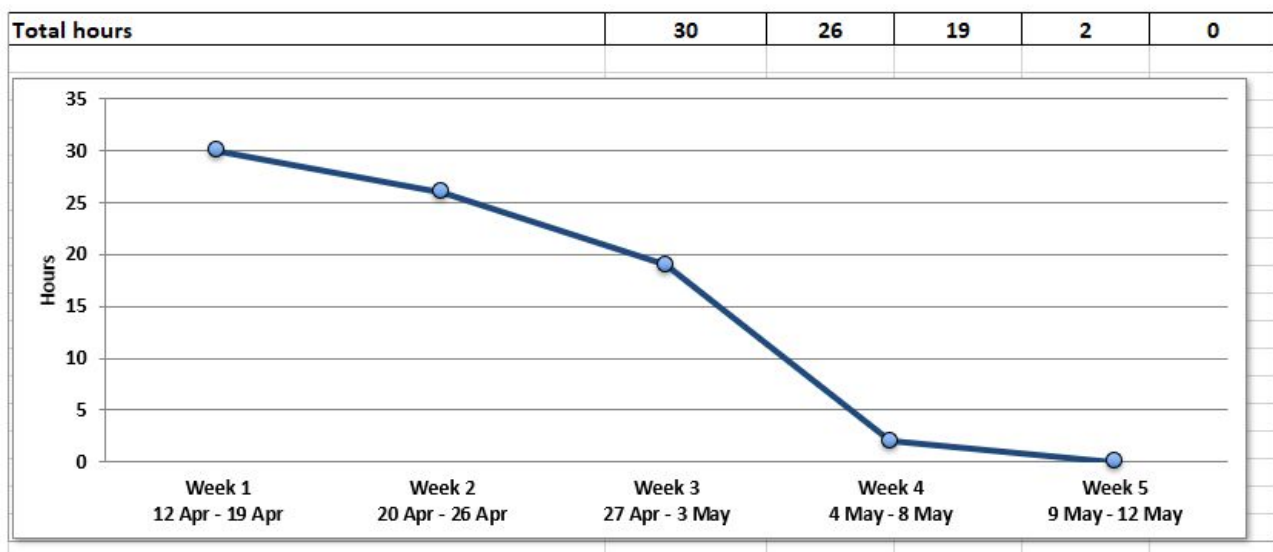
Student Id: 20603195

	Week 1 12 Apr - 19 Apr	Week 2 20 Apr - 26 Apr	Week 3 27 Apr - 3 May	Week 4 4 May - 8 May	Week 5 9 May - 12 May
Sprint Tasks (Sprint Backlog)					
Capture and parse user requirements on Telegram	1	0	1	0	0
Revise user requirement specifications	1	0	1	0	0
Implement data structure	2	2	0	0	0
Study JavaFX's usage	2	1	0	0	0
Study Scraper class skeleton's usage	2	1	0	0	0
Modify Scraper class to support data structure	2	2	0	0	0
Implement Filter tab user interface	1	1	0	0	0
Implement Filter controller class	4	4	2	0	0
Unit test on Filter's functionalities	2	2	2	0	0
Documentation on Filter's functionalities	2	2	2	1	0
Implement List tab user interface	3	3	3	0	0
Implement List controller class	4	4	4	0	0
Unit test on List's functionalities	2	2	2	0	0
Documentation on List's functionalities	2	2	2	1	0

Typical Student

COMP 3111: Sprint 2 Backlog and Burndown Chart

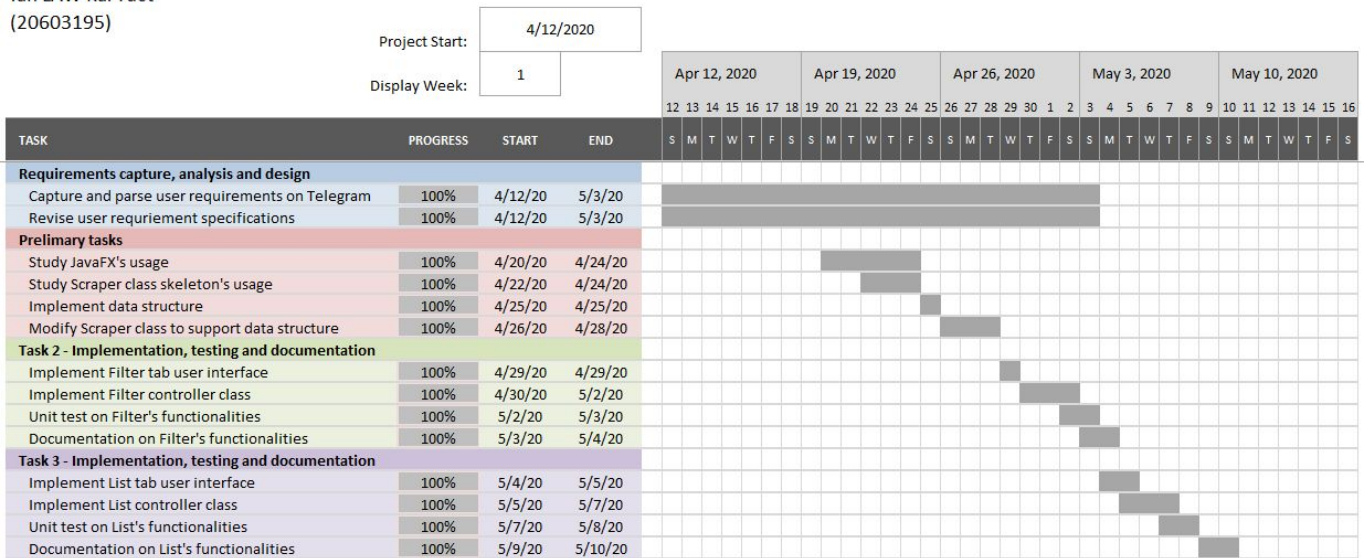
Student Id: 20603195



Gantt Chart

COMP3111 Project: Course Scrapper

Ian LAW Kai Yuet
(20603195)



Justin Li's Burndown Chart and Gantt Chart

Backlog and Burndown Chart

LI, Lok Yin (Justin)

COMP 3111: Sprint 2 Backlog and Burndown Chart

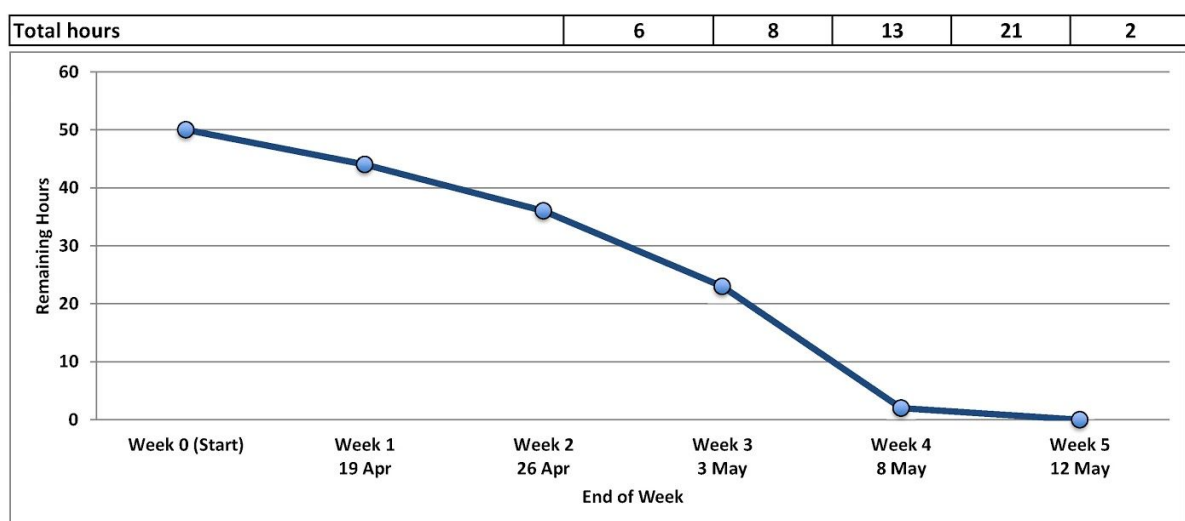
Student ID: 20409850

Sprint Tasks (Sprint Backlog)	Week 1 12 Apr - 19 Apr	Week 2 20 - 26 Apr	Week 3 27 Apr - 3 May	Week 4 4 - 8 May	Week 5 9 - 12 May
Design implementation structure for SFQ	1	0	0	0	0
Implement SFQ class for data storage	1	1	0	0	0
Study Scraper class usage and Xpath structure	2	1	1	0	0
Implement scrapeSFQ function for enrolled classes	0	2	4	2	0
Modify controller for enrolled classes SFQ search	0	1	0	1	0
Implement scrapeInstructorSFQ function	0	1	3	3	0
Modify controller for instructor SFQ search	0	0	0	1	0
Design implementation structure for Timetable	2	0	0	0	0
Implement TimetableBlock class for block creation	0	1	3	4	0
Update SFQ controller with enrolledCourseList	0	0	0	1	0
Unit test on SFQ functionalities	0	0	0	3	0
Documentation of SFQ class functionalities	0	0	0	1	1
Modify List controller class for timetable update	0	1	2	4	0
Unit test on TimetableBock functionalities	0	0	0	1	0
Documentation of TimetableBlock class functionalities	0	0	0	0	1

LI, Lok Yin (Justin)

COMP 3111: Sprint 2 Backlog and Burndown Chart

Student ID: 20409850



Gantt Chart

COMP3111 Project: Course Scraper

LI, Lok Yin (Justin)
20409850

Sun, 4/12/2020
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