

Assessment Cover Sheet

This Assessment Cover Sheet is only to be attached to hard copy submission of assessments.



ASSESSMENT DETAILS

Unit title	Technical Software Development	Tutorial /Lab Group	Lab 2 Group 1	Office use only
Unit code	SWE 20004	Due date	10/09/2021	
Name of lecturer/tutor	Chai Pui Ching			
Assignment title	Assignment Task 1			Faculty or school date stamp

STUDENT(S) DETAILS

	Student Name(s)	Student ID Number(s)
(1)	Sze XiJie	101222928
(2)	Chin Kai Lun	101221815
(3)	Chen Jun Yao	101222889
(4)	Ooi Yik Quan	101230222
(5)		
(6)		

DECLARATION AND STATEMENT OF AUTHORSHIP

1. I/we have not impersonated, or allowed myself/ourselves to be impersonated by any person for the purposes of this assessment.
2. This assessment is my/our original work and no part of it has been copied from any other source except where due acknowledgement is made.
3. No part of this assessment has been written for me/us by any other person except where such collaboration has been authorised by the lecturer/tutor concerned.
4. I/we have not previously submitted this work for this or any other course/unit.
5. I/we give permission for my/our assessment response to be reproduced, communicated, compared and archived for plagiarism detection, benchmarking or educational purposes.

I/we understand that:

6. Plagiarism is the presentation of the work, idea or creation of another person as though it is your own. It is a form of cheating and is a very serious academic offence that may lead to exclusion from the University. Plagiarised material can be drawn from, and presented in, written, graphic and visual form, including electronic data and oral presentations. Plagiarism occurs when the origin of the material used is not appropriately cited.

Student signature/s

I/we declare that I/we have read and understood the declaration and statement of authorship.

(1)	Sze XiJie	(4)	Ooi Yik Quan
(2)	Chin Kai Lun	(5)	
(3)	Chen Jun Yao	(6)	

Further information relating to the penalties for plagiarism, which range from a formal caution to expulsion from the University is contained on the Current Students website at <https://www.swinburne.edu.my/current-students/manage-course/exams-results-assessment>

Copies of this form can be downloaded from the Student Forms web page at <https://www.swinburne.edu.my/current-students/manage-course/exams-results-assessment/how-to-submit-work.php>

SWE20004

Assignment - Task 1 Contribution Sheet

Lab Group: [Group 1 / Group 2]

Team Leader: Sze XiJie

Student Name	Student ID	Tasks – Work undertaken to complete the group assignment	% contribution
Sze XiJie	101222928	Menu and sqlite3 (database)	25%
Chin Kai Lun	101221815	Candidate ID and Name	25%
Chen Jun Yao	101222889	Option 2 (Viewing Candidate)	25%
Ooi Yik Quan	101230222	Randomised Division	25%

Signatures for approval

Each group member must sign this sheet in acknowledgement that he/she has read and accepted the contribution stated above.



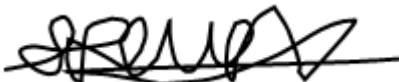
Name: Sze XiJie



Name: Chin Kai Lun



Name: Chen Jun Yao



Name: Ooi Yik Quan

Project Brief

Project Title: Election-Voter

Lab Group: Lab 2 Group 1

Project Team Name: Amadeus

Project Members:

- Adam Sze XiJie 101222928 (Group Leader)
- Chin Kai Lun 101221815
- Chen Jun Yao 101222889
- Ooi Yik Quan 101230222

Contents

1. Report	2
2. Program Explanation.....	4
2.1. Menu (Sze XiJie)	4
2.2. Candidate Verification (Chin Kai Lun)	4
2.3. Division Categorising (Ooi Yuk Quan)	4
2.4. Viewing Candidate Information (Chen Jun Yao)	4
Figure 1: Flowchart for Candidate Menu	2
Figure 2: Flowchart for Voter Menu	3
Figure 3: Main Menu.....	5
Figure 4: When candidate is full	5
Figure 5: Viewing Candidates Menu	6
Figure 6: Exiting Program	7
Figure 7: When User Input Invalid Option	7
Figure 8: Adding Candidate Menu	7
Figure 9: Adding Candidate Successful	7
Figure 10: Input Error for Adding Candidate	8
Figure 11: Viewing Candidates When No Candidate Available	8

1.Report

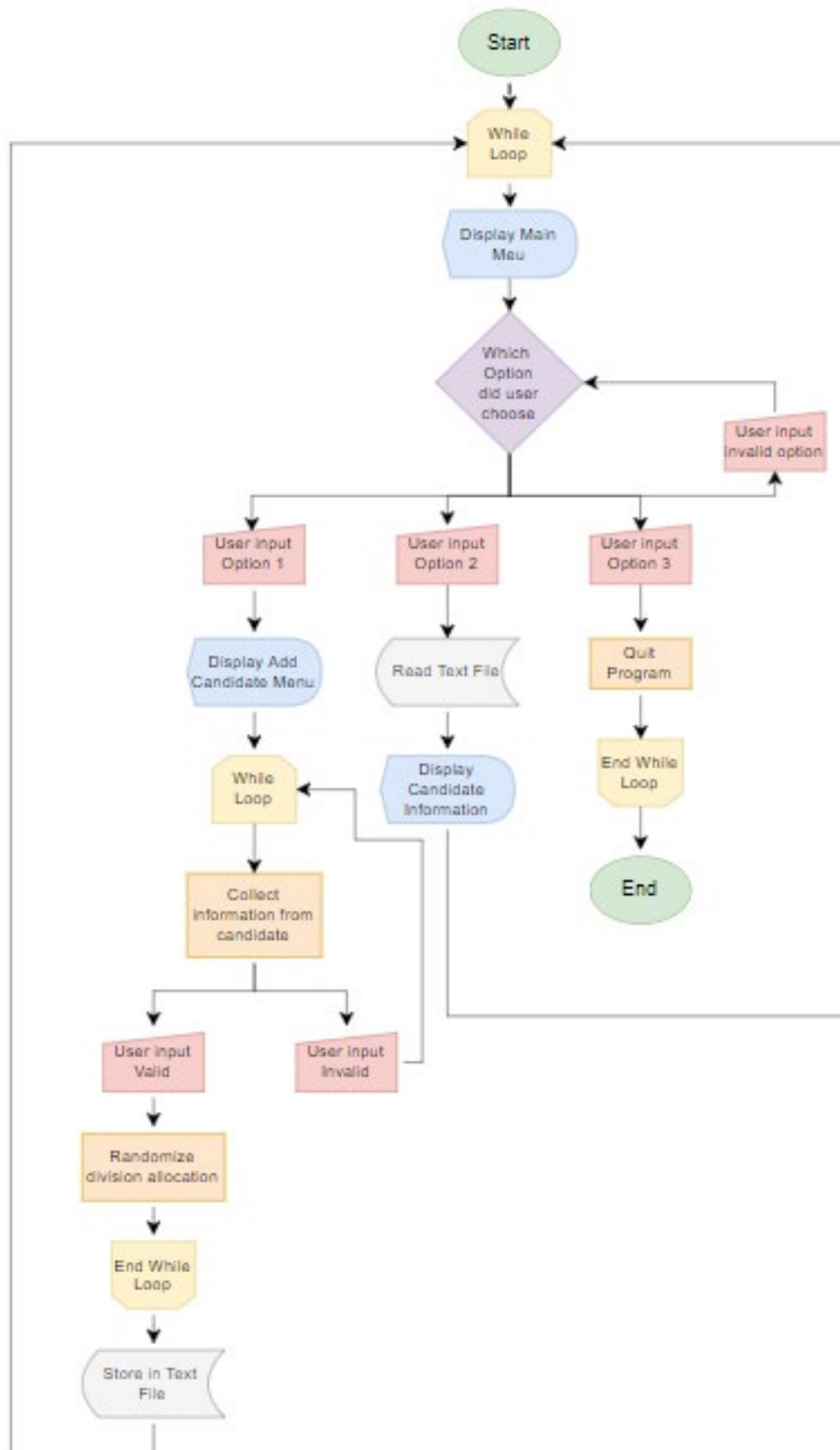


Figure 1: Flowchart for Candidate Menu

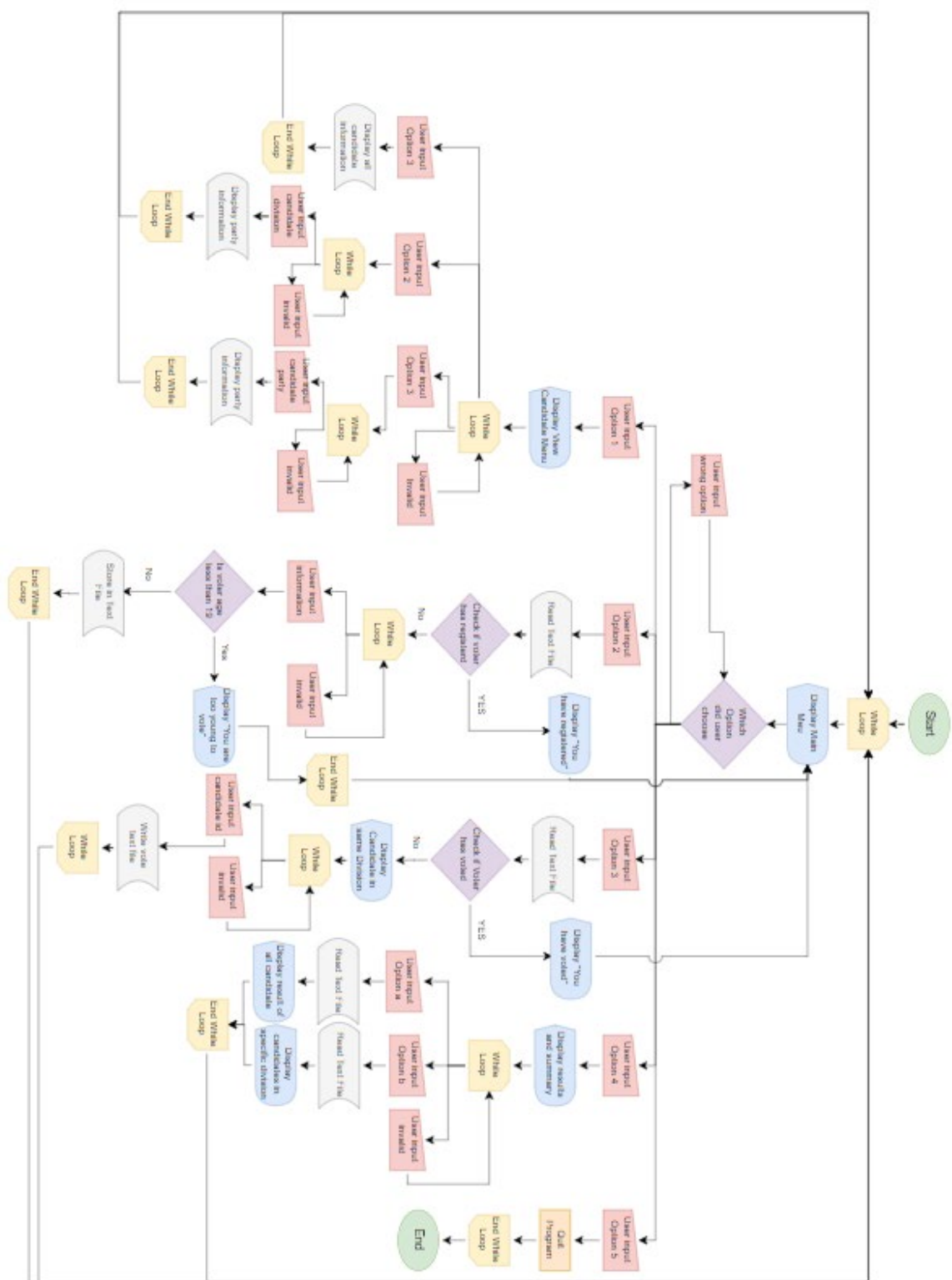


Figure 2: Flowchart for Voter Menu

2. Program Explanation

2.1. Menu (Sze XiJie)

The menu for the program created allows the user to re-enter their input when they have entered an invalid input. The text that is displayed on the console will also refresh so that the console will not be too clustered with previously displayed text.

2.2. Candidate and Party Verification (Chin Kai Lun)

The candidate verification task is to allow the user to enter their name. Then the program will validate the users input to make sure that the user input is valid. Next, the candidates will be assigned random party names which will then be used for their candidate id by getting the first 3 letters of the party's name followed by 2 digits.

2.3. Division Categorising (Ooi Yuk Quan)

For "Division Categorising", it is to randomise each division from 1 to 4 for the candidate to key in their name and store it in a randomised division, which the candidate is not allowed to choose themselves the division that they want. After randomising the division to store the candidates' data, each division only allows a maximum of 3 candidate profiles or data inside the division where it is stored. Therefore, if there are 3 candidates in a particular division, this division will not store any more candidates' data. The program will simply store the candidate into a different division. When all divisions are full, the program will say that "All divisions are full currently." or "The registration for candidates is over."

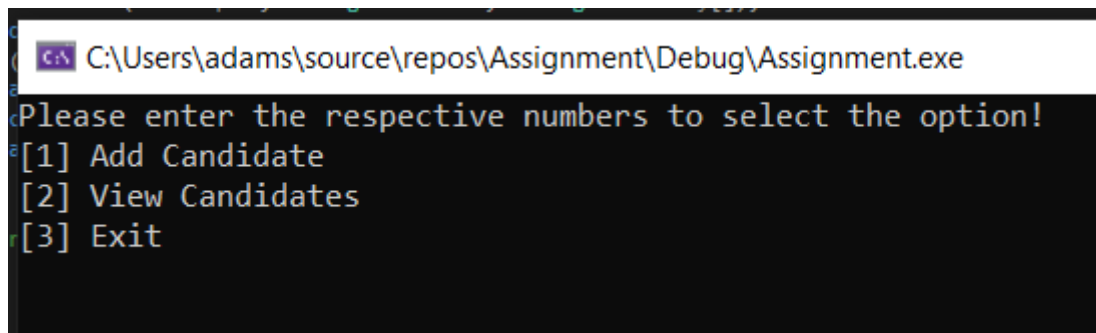
2.4. Viewing Candidate Information (Chen Jun Yao)

Option number 2 of the menu will first read data from the database file. The information displayed will be in ascending order where division 1 is first displayed followed by division 2, 3 and lastly division 4. If the database is empty, the menu will display a text notifying the user that there is currently no candidates.

2.5. Sqlite3 (Sze XiJie)

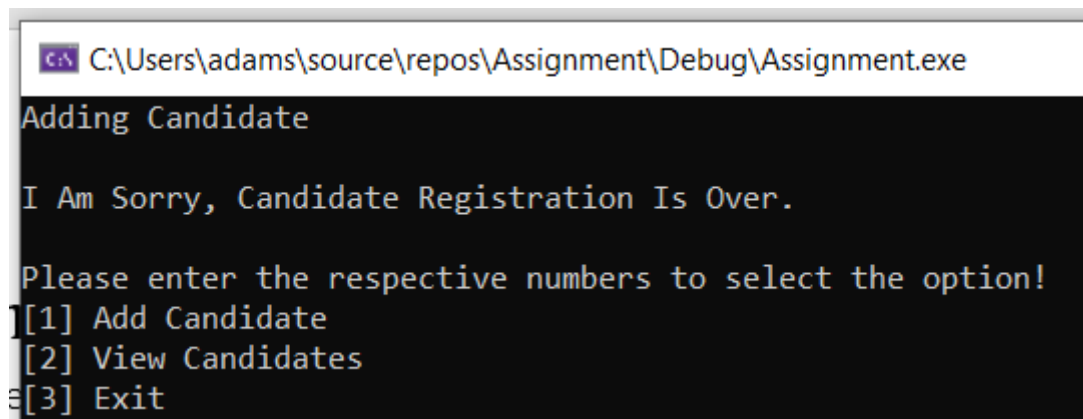
Sqlite3 is a database for which we store in our candidate information. This replaces the need of using a text file as the data will be stored in a database. The database is first created in the c: drive with a folder name called StoreData. With that, the program will create a db file in that folder to store the data. To implement sqlite3, all the tasks done by each member will be combined and some changes will be made.

Below is the figure for testing:



```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Please enter the respective numbers to select the option!
[1] Add Candidate
[2] View Candidates
[3] Exit
```

Figure 3: Main Menu



```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Adding Candidate
I Am Sorry, Candidate Registration Is Over.
Please enter the respective numbers to select the option!
[1] Add Candidate
[2] View Candidates
[3] Exit
```

Figure 4: When candidate is full


```
Name: y
CandidateID: EIN03
Party: Einstein
Division: 3
Vote: 0

Name: i
CandidateID: TES03
Party: Tesla
Division: 3
Vote: 0

Name: p
CandidateID: MOZ03
Party: Mozart
Division: 3
Vote: 0

Name: r
CandidateID: EIN04
Party: Einstein
Division: 4
Vote: 0

Name: t
CandidateID: TES04
Party: Tesla
Division: 4
Vote: 0

Name: s
CandidateID: MOZ04
Party: Mozart
Division: 4
Vote: 0

Data Selected Successfully

Please enter the respective numbers to select the option!
[1] Add Candidate
[2] View Candidates
[3] Exit
```

Figure 5: Viewing Candidates Menu

```
Microsoft Visual Studio Debug Console
Exiting Program

C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
To automatically close the console when debugging ends, press Ctrl+Shift+F5.
Press any key to close this window . . .
```

Figure 6: Exiting Program

```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Your Selected Option Is Invalid, Please Try Again!

Please enter the respective numbers to select the option!
[1] Add Candidate
[2] View Candidates
[3] Exit
```

Figure 7: When User Input Invalid Option

```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Adding Candidate

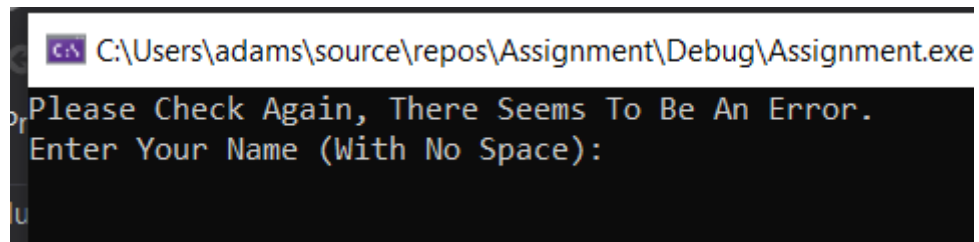
Enter Your Name (With No Space):
```

Figure 8: Adding Candidate Menu

```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Data Inserted Successfully!

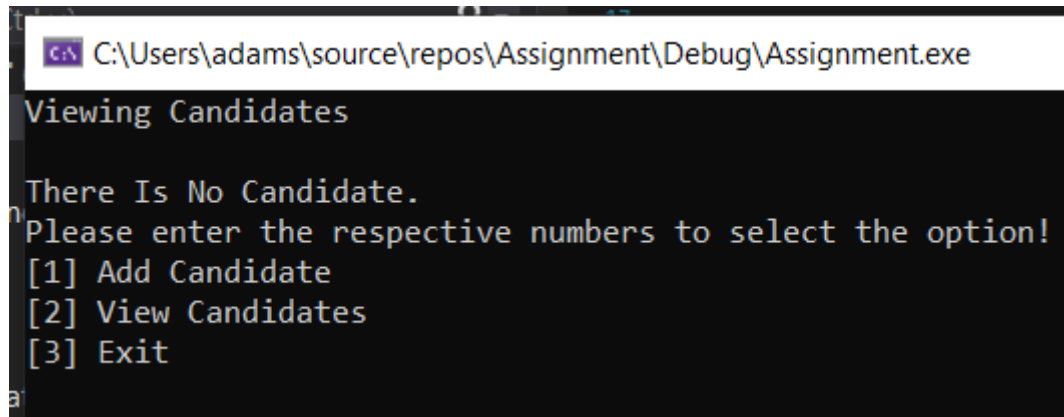
Please enter the respective numbers to select the option!
[1] Add Candidate
[2] View Candidates
[3] Exit
```

Figure 9: Adding Candidate Successful



```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Please Check Again, There Seems To Be An Error.
Enter Your Name (With No Space):
```

Figure 10: Input Error for Adding Candidate



```
C:\Users\adams\source\repos\Assignment\Debug\Assignment.exe
Viewing Candidates

There Is No Candidate.
Please enter the respective numbers to select the option!
[1] Add Candidate
[2] View Candidates
[3] Exit
```

Figure 11: Viewing Candidates When No Candidate Available