

Tejesh's Diary

Date 14/10/2014

Time:9:30am to 11:00am

Venue:Hostel H15-B room no.316

Present: Tejesh Siddarth Amit

Task performed: Discussed various topics for project such as 1)Suduko autosolver

2)Minesweeper

3)Banking

4)Contacts

5)Electricity bill preparation

6)Post JEE Branch Alottement

Finalised the project topic as Banking

Discussed about the features to be involved in the program

Planned the features to be 1)creating new account ,

- 2) modifying it ,
- 3) basic transactions,
- 4) interest calculations ,
- 5) deleting account

Date 15/10/2014

Time:8:30pm to 11:00pm

Venue:Old Software Lab

Present: Tejesh Siddarth Amit

Task performed:

Met the TA and discussed about the files to be submitted in the stage1 like SRS document and project report.

Then the three of us went through some of the previous years' SRS documents and discussed about how our SRS should look like. finally, we started our work on the SRS.

We made the flowchart in the lab including some cliparts from google images.

We also divided our basic work as:

Tejesh and Siddharth - main code of the program

Amit - graphics input and design

Date:18/10/2014

Time:3:30pm to 7:30pm

Venue:Hostel H15-B room no.316

Present: Tejesh Siddarth Amit

Task performed: Designed a layout of our program code

Our main job was to save the data so that we could use the same accounts for the next time we opened our program

I and Siddarth searched a lot of time to manage file system through c++.

I learned to manage files a bit from www.cplusplus.com under the library `cstdio.h`

I also browsed through some sample programs from internet which used saving data with the help of files

I made a rough idea of how to give instructions to the compiler to make our desired functions

Date:19/10/2014

Time :5:30pm to 9:00pm & 10:00pm to 11:30pm (5 hours)

Venue :Hostel H15-B room no.316

Present: Tejesh Siddarth Amit

Task : First of all we prepared the project report .Siddarth did major part of it.

Then I decided what functions should be included in our program. I decided the tasks to be performed by those functions.

I browsed through many previous years projects to get an idea which functions must be written.

With this function implementation part of our SRS was completed.

Then we prepared the Data specification required for our project.

Then we decided how the output of program might be.

This task of preparing SRS was given to me.

I also made some parts of code to wrote the SRS.

Date: 29/10/2014

Time: 9:00pm to 10:30pm

Venue: OSL

Task performed:

- I had some discussions on how to include graphics in our program, how the program should actually behave.
- We planned that buttons must be present to take users choice, that is what functions the user want to perform.
- I browsed through internet how to include graphics in our program.
- We decided the main skeleton of our program.
- I learned a bit how classes work in c++.
- We decided the structures that must be included in our program.
- We decided our further timings to meet next time.

Date: 5/11/2014

Time: 8:15pm to 10:15pm

Venue: OSL

Task performed:

- Started making framework of our program.
- I made various structures required for maintaining accounts in our banking management system.
- I also referred to various functions to perform various file operations from Handout on our course homepage's link

[http://www.cse.iitb.ac.in/~cs101/lecture-slides/handout file functions CS101X.pdf](http://www.cse.iitb.ac.in/~cs101/lecture-slides/handout_file_functions_CS101X.pdf)

- I also tried to run sample programs of simplecpp given at following address

<http://www.cse.iitb.ac.in/~cs101/Project/simplecpp/Windows/Simplecpp Projects.tar.g>

z

but failed to run them.

- Compiler was showing a fatal error : simplecpp : no such directory exists.

Date: 18/11/2014 - 19/11/2014

Time: 10:00pm to 1:15am

Venue: Hostel H15-B ,room no.316

Present : only me

Task performed:

- I wrote the framework of our program.
- I went through our User's manual to display correct messages arranged properly.
- I went through lecture videos by Phatak sir on file handling available at our course homepage.
- While writing the framework I wrote the conditions required to prepare an account .
- I also took care of the cases when a invalid input may cause the program to terminate
- I wrote the major structure of the program:

Date: 19/11/2014

Time: 10:00am to 1:15pm

Venue: Hostel H15-B ,room no.316

Present : only me

Task performed:

- Learnt how to clear screen completely before printing out new messages
- Placed the command to clear screen at appropriate places in the program
- Learnt how to use the goto function
- Used goto function at appropriate places –When user gives an invalid input to take the input again from customer.
- Prepared the form to be filled by the customer while creating a new account:

Date: 19/11/2014

Time: 3:00pm to 5:30pm

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth Amit

Task performed:

- Created a different function to create an account
- Learnt how to use the pause function i.e. press any key to continue
- Learnt how to seek the position of cursor to end of file (took a lot of time because there are many compilers and hence all the codes shown on different websites on internet don't actually work on code blocks).
- Used the fwrite function to write the details of the new account to a text file for reference in the future of the account. This feature helps to save the details so that they can be accessed even if the program is restarted.

- Managed the account numbers with the help of a count variable which takes the value of count by dividing the size of file by the size of each record. This feature would help to easily access the account later without searching for the required account number throughout the database.

Date: 20/11/2014

Time: 10:45am to 12:15pm

Venue: Hostel H15-B ,room no.316

Present : Only me

Task performed:

- I wrote the code to validate the account number and PIN.
- For this purpose I went directly to the record corresponding to the given account number by seeking the cursor to the required position instead of doing any kind of search.
- Placed it at the appropriate place i.e. when the customer says that he already has an account.

Date: 20/11/2014

Time: 2:00pm to 5:30pm

Venue: Hostel H15-B ,room no.316

Present : Only me

Task performed:

- Created the functions to modify account
- Created the function to debit money from the account.
- Created the function to credit money into the account.

Date: 20/11/2014

Time: 6:00pm to 8:30pm

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth

Task performed:

- Created the function to delete an account. In delete account I simply used to change the balance and PIN of the account to 0.
- Created the function to view the details of an account.
- For making all these functions I took help of two functions each. One within the structure customer and other global to called from main().

Date: 20/11/2014 – 21/11/2014

Time: 10:00pm to 12:30am

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth

Task performed:

- Learnt how to make buttons in simplecpp by first making rectangle and then getting click by mouse .
- Learnt how the coordinates of the click are obtained

$X = \text{clickPos} / 65536$ and $Y = \text{clickPos} \% 65536$

- Learnt how to recognize where the mouse has been clicked by applying conditional statement to limit range of the x and y co-ordinates of the rectangle of the button.
- Learnt how to call a function when a button has been clicked.
- Added some special features to the button so that it changes color to red temporarily for 0.5 seconds to show the effect that the button has been clicked.

Date: 21/11/2014

Time: 10:00am to 11:30am

Venue: Hostel H15-B ,room no.316

Present : Only me

Task performed:

- Finished all the non-graphic part of our project
- I run the program and found some silly errors. I corrected them.
- Prepared the non-graphical part of our welcome screen.
- Formatted the output by using the `system("cls");` and `system("pause");` functions at appropriate places.
- Run the program and corrected many errors while playing with the program.

Date: 21/11/2014

Time: 02:00pm to 5:30am

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddharth

Task performed:

- Attached the graphical buttons made by Siddharth at appropriate places.
- Attached required functions associated with the buttons in their code body.
- We planned to convert our complete program into the canvas mode i.e. to be displayed completely on the white screen. But we came to know that we can't take input from the keyboard once we are in the canvas screen of simplecpp. It doesn't even provide a textbox to input any value from keyboard.

- Hence we planned to display the output part on the canvas screen and to take the input from the console screen by opening and closing the canvas screen at appropriate places in the program.
- But again there was a problem we could not open back and draw anything on the canvas once we have closed it.
- Finally I got an idea that we will keep both the windows, one of console and other of canvas open together while execution of the program. To change any matter on the canvas screen I planned to cover it by a rectangle of the same size as that of the canvas so that we could draw other next items on it and take input appropriately.

Date: 21/11/2014

Time: 6:00pm to 8:30pm

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth

Task performed:

- We finally worked out with the idea by adding suitable code at appropriate places in the program.
- But we came up with many errors during this process.
- We cleared all of the errors and ran over program.
- It worked correctly for the first time that is for the account with account number 1000 but stopped to work for other accounts
- I had spent a lot of time to detect that error since file and record management was the most important part of our project.
- The error occurred because I had not assigned count variable its value at the exact place that it was suppose to be.

Date: 21/11/2014-22/11/2014

Time: 10:00pm to 1:30am

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth

Task performed:

- I put the conditions so that the account balance don't get below 1000 while creating, modifying, debiting or transferring from an account
- We decided to add some more features to our program- We planned to add two more buttons that would appear after being logged in.
- The two buttons were one for taking a loan and another for applying for a fixed deposit.

- These two functions would ask the user the amount of money and the time and would return back the amount to be paid or the amount that would get deposited into their account after the given time.
- For adding these two buttons we had to shift all previous buttons, their conditions of getting clicked, their text, etc.
- I wrote down codes of both the functions by managing correctly with the files.
- After this we ran our program several times to remove any small errors still remaining
- We showed our friends (doing other projects) and asked them to run the program by themselves. While doing this we came to know about various possibilities of getting input and the purpose to manage them.

Date: 23/11/2014

Time: 6:30pm to 9:30pm

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth

Task performed:

- Removed many new bugs from the program.
- Changed the appearance of the buttons and the background by giving different colors to them for this we referred to the RGB color code from the link:
http://www.rapidtables.com/web/color/RGB_Color.htm
- Added buttons to the modify menu.
- Printed the new account number on the canvas screen when a new account is created.
- File was not properly managed in the transfer function. The error was removed.

Date: 23/11/2014

Time: 10:00pm to 11:30pm

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddarth Amit

Task performed:

- Started preparing the user's manual
- Decided the format in which the user's manual should appear.
- Ran the program several times to remove many errors that could appear during the run-time.

Date: 24/11/2014

Time: 10:00am to 11:30am

Venue: Hostel H15-B ,room no.316

Present : Only me

Task performed:

- Created the user's manual.
- Included screenshots from our running project to improve the presentation so that a new user may find it very easy how to go through the application.

Date: 24/11/2014

Time: 2:00pm to 5:30pm,6:00pm to 9:00pm,9:30pm to 11:30pm

Venue: Hostel H15-B ,room no.316

Present : Tejesh Siddharth Amit

Task performed:

- I completed making the user's manual. I included each and every function performed by our program to the user's manual.
- Added yes or no option in the canvas for asking conformation in the functions of delete_account, loan_account and fixeddeposit_account.
- Prepared SRS by referring the complete program, its various functions, variables,etc.
- Explained in detail the purpose of various functions and variables used up in the program

- Referred to our previous SRS of stage 1 for making other parts such as introduction, etc.
- Made some changes in the Project Report made by Siddharth. I added some features of our program and some new references.
- Converted all docx files into pdf
- Prepared the team's diary with Siddharth.