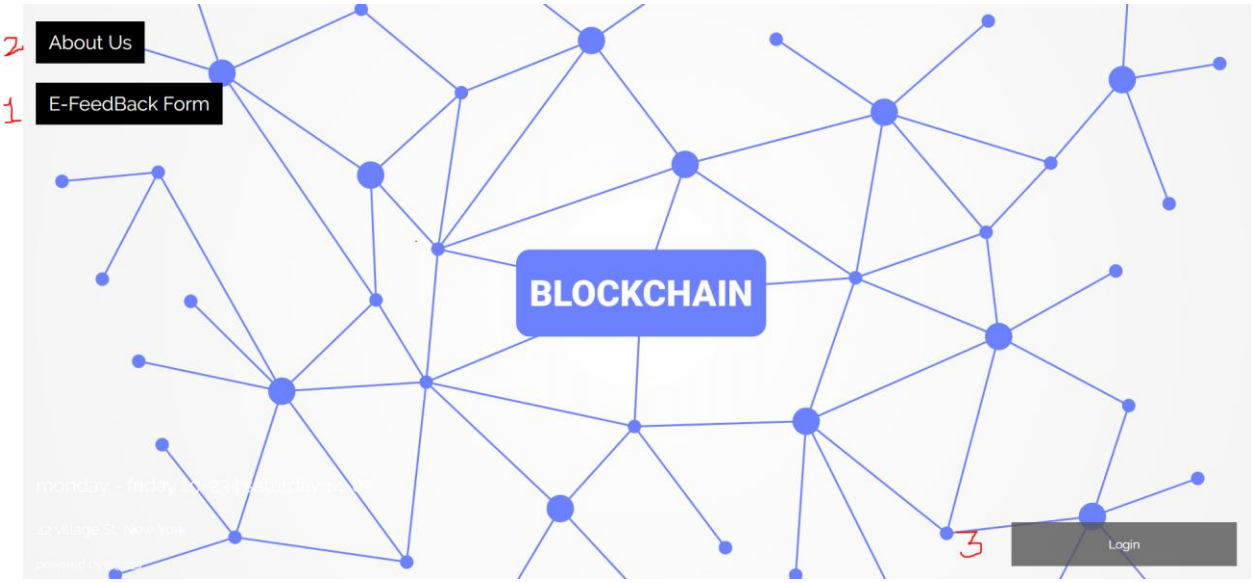
How We Collect Data?

Before diving deep into this software, this software has two-phases

1. Phase-1
2. Phase-2

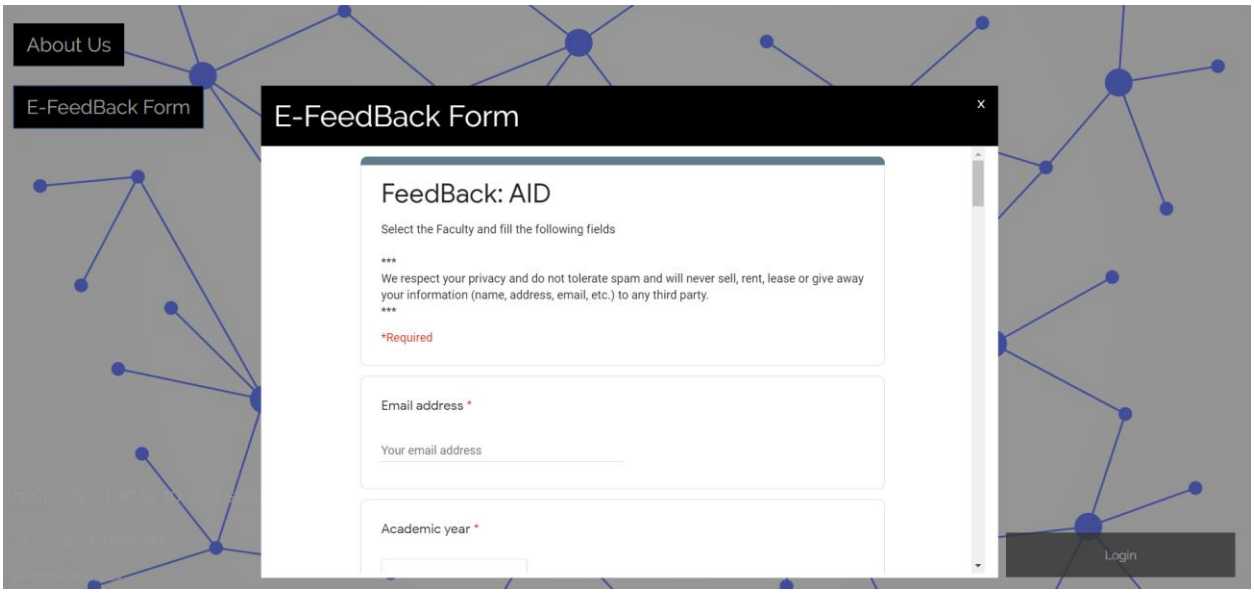
Phase-1 deals with the generation of feedback table and graph, whereas Phase-2 is mining that feedback into the blockchain.

Feedback AID collects data from students itself. Students have to fill the e-Feedback form, http://collegeblock.pythonanywhere.com/.



1. E-FeedBack Form: click it to open the feedback form

The form is simple and every field is self-explanatory. We'll open this form for a duration, say a week and ask students to fill it. Student information will be kept hidden, as per our privacy policy. The form is anonymous as well.



The data get collected into a CSV file, rows and columns. Where we do some filtering for easy data processing.

Course	Name of the Facu	Semester	Date	Has the Teacher covere	Has the Teacher	Effectiven	Ef
Microprocessors	Dr. SK Singh	1	07/12/2019	3	5	4	
Microprocessors	Dr. SK Singh	1	08/12/2019	3	5	4	
Microprocessors	Dr. SK Singh	1	09/12/2019	3	5	4	
Microprocessors	Dr. SK Singh	1	10/12/2019	3	5	4	
Microprocessors	Dr. SK Singh	1	11/12/2019	3	5	4	
Microprocessors	Dr. SK Singh	1	12/12/2019	3	5	4	
Microprocessors	Dr. SK Singh	1	13/12/2019	3	5	4	

2. About Us: To know about the team and developers.

3. Login:

Administrator login:

Password: a

Username: a

Client Login:

Password: b

Username: b

How We Use This Data?

Our software's phase one, use this data to generate both Tabular aggregation and graph. Here the user will be select teacher & course and That's it. It will produce the data.

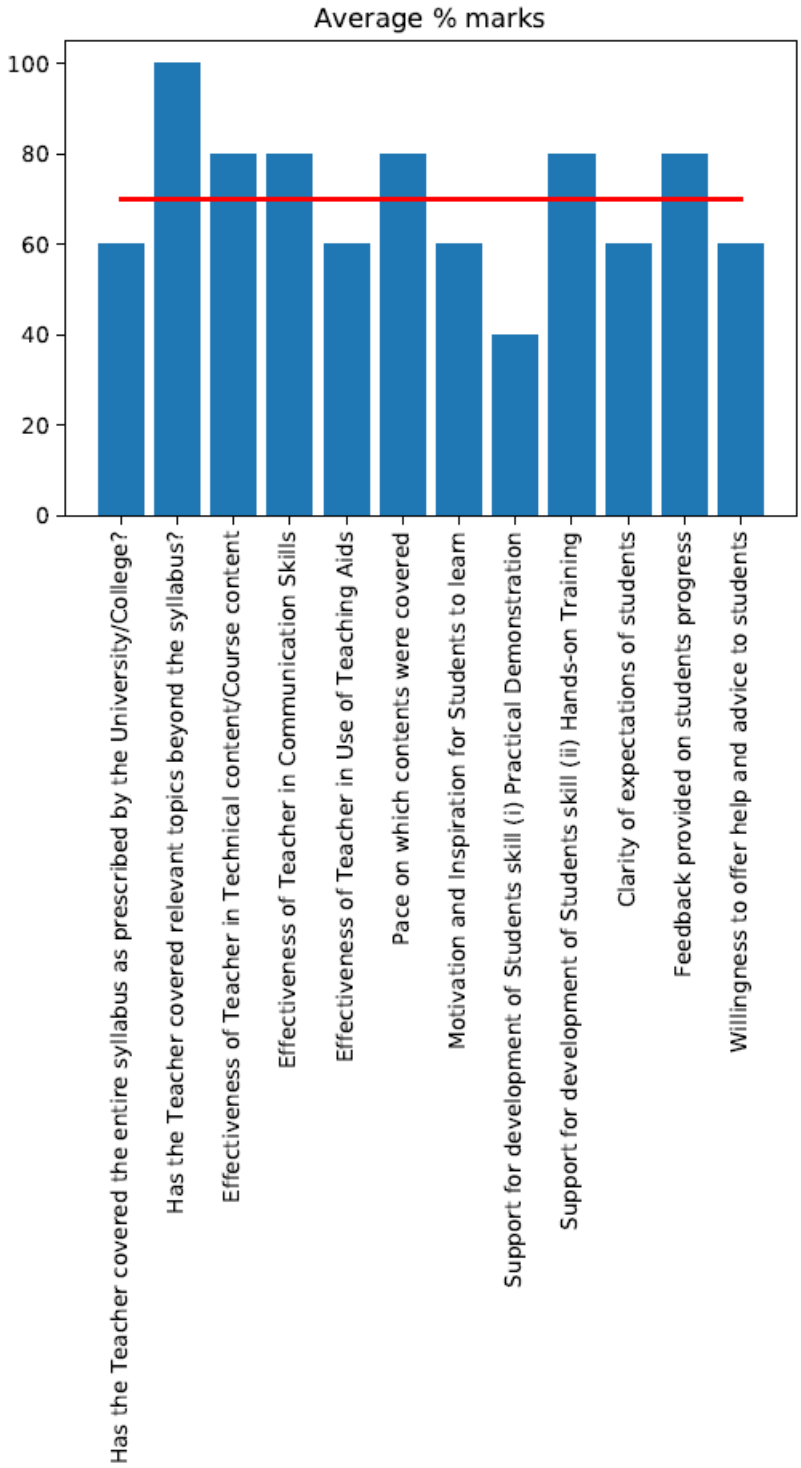
our software takes the teacher's name and course as an input, then it runs through the data and picks corresponding feedback of the inputs. Then it calculates aggregations as follows:

1. Total no. of students in each opinion
2. Total marks
3. Percentage
4. Average Feedback Marks
5. Max Marks
6. % Average Marks
7. Average FeedBack on the Scale of 25
8. Review opinions

The next step is storing all these attributes in an excel/CSV file, This file is preformatted by the software itself and get saved by name TeacherName_CourseName.xlsx

Name of teacher	Dr. SK Singh							
Subject	Microprocessors							
Session	July-Dec							
Total Students	7							
Sr. No.	Description	Very poor	Poor	Good	Very Good	Excellent	Total Mark	%Marks
1	Has the Teacher covered the entire syllabus as prescribed by	0	0	7	0	0	21	60
2	Has the Teacher covered relevant topics beyond the syllabus	0	0	0	0	7	35	100
3	Effectiveness of Teacher in Technical content/Course conte	0	0	0	7	0	28	80
4	Effectiveness of Teacher in Communication Skills	0	0	0	7	0	28	80
5	Effectiveness of Teacher in Use of Teaching Aids	0	0	7	0	0	21	60
6	Pace on which contents were covered	0	0	0	7	0	28	80
7	Motivation and Inspiration for Students to learn	0	0	7	0	0	21	60
8	Support for development of Students skill (i) Practical Demo	0	7	0	0	0	14	40
9	Support for development of Students skill (ii) Hands-on Train	0	0	0	7	0	28	80
10	Clarity of expectations of students	0	0	7	0	0	21	60
11	Feedback provided on students progress	0	0	0	7	0	28	80
12	Willingness to offer help and advice to students	0	0	7	0	0	21	60
	Total	0	7	35	35	7	294	
Average Feedback Marks	24.5							
Max Marks	35							
%Average Marks	70							
Average FeedBack on the Scale of	17.5							
Review opinions	15.95714286							

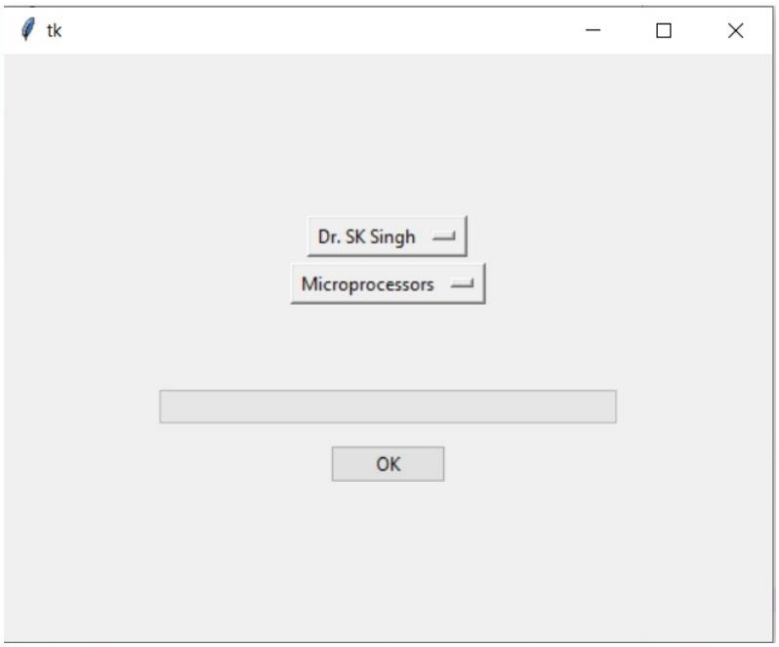
The final step of this phase-1 software is to generate a visual representation of the results i.e. graph, where feedback questions are in x-label and score in y-label. This file get saved as PDF file with name TeacherName_CourseName.pdf



Both the tabular form and graphical form get saved to the user's local system and then just one click away to get the result i.e. clicking the print command. Hence, saving time and helps in easily manipulation and calculation.

How to use this software?

This software is made by keeping in mind that the user may have no technical knowledge. The GUI is initially very simple, two input field’s teacher's name, course and one button "OK" to start the process.

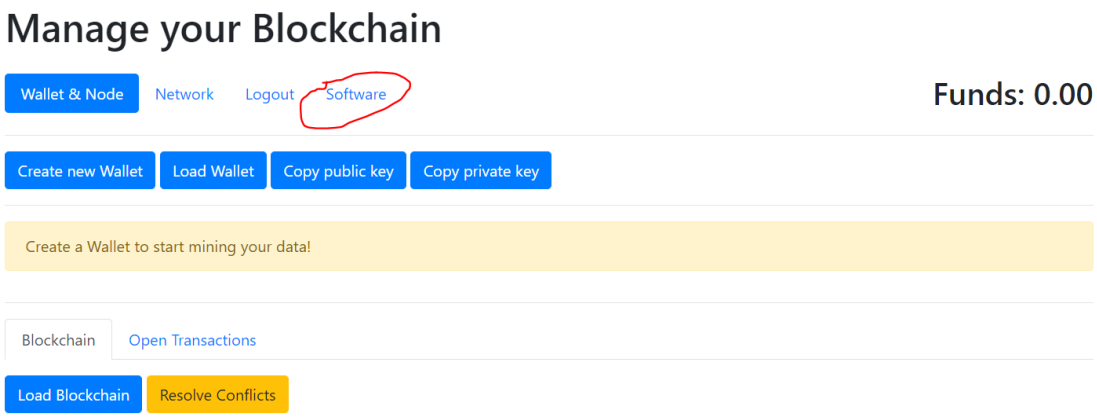


Steps for how to use this software solution phase-1

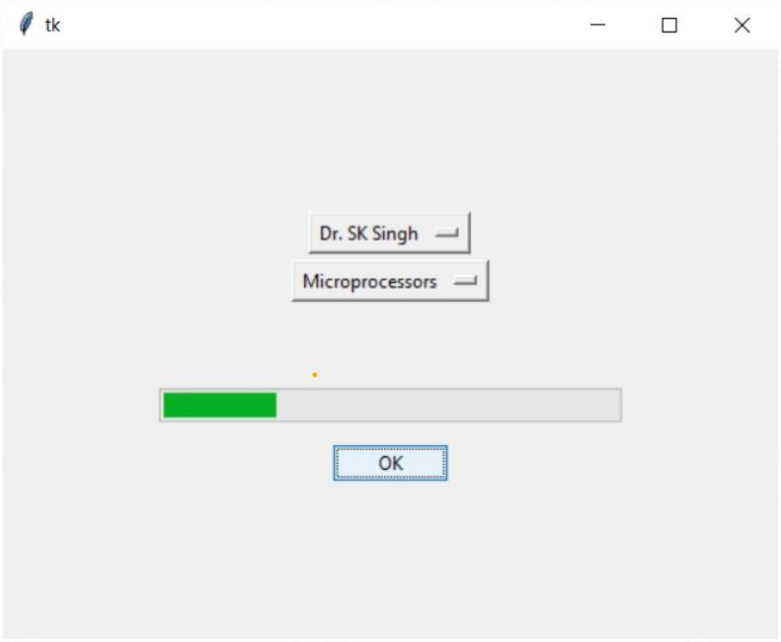
Pre-requisites: Python distribution, CSV file reader (MS-excel, WPS office etc.), Internet connection (As sentiment analysis's API is hosted on a webserver)

1. Download and install this python distribution (https://www.anaconda.com/distribution/)
2. Go to http://collegeblock.pythonanywhere.com/ and login as administer

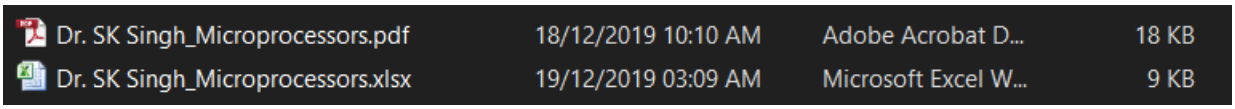
   Click the Software hyperlink to get the software as shown in the figure below.



3. Download the software.
4. Download the “feedback.csv”
5. Run the software, input the fields and click "OK". The progress bar will show you the progress.



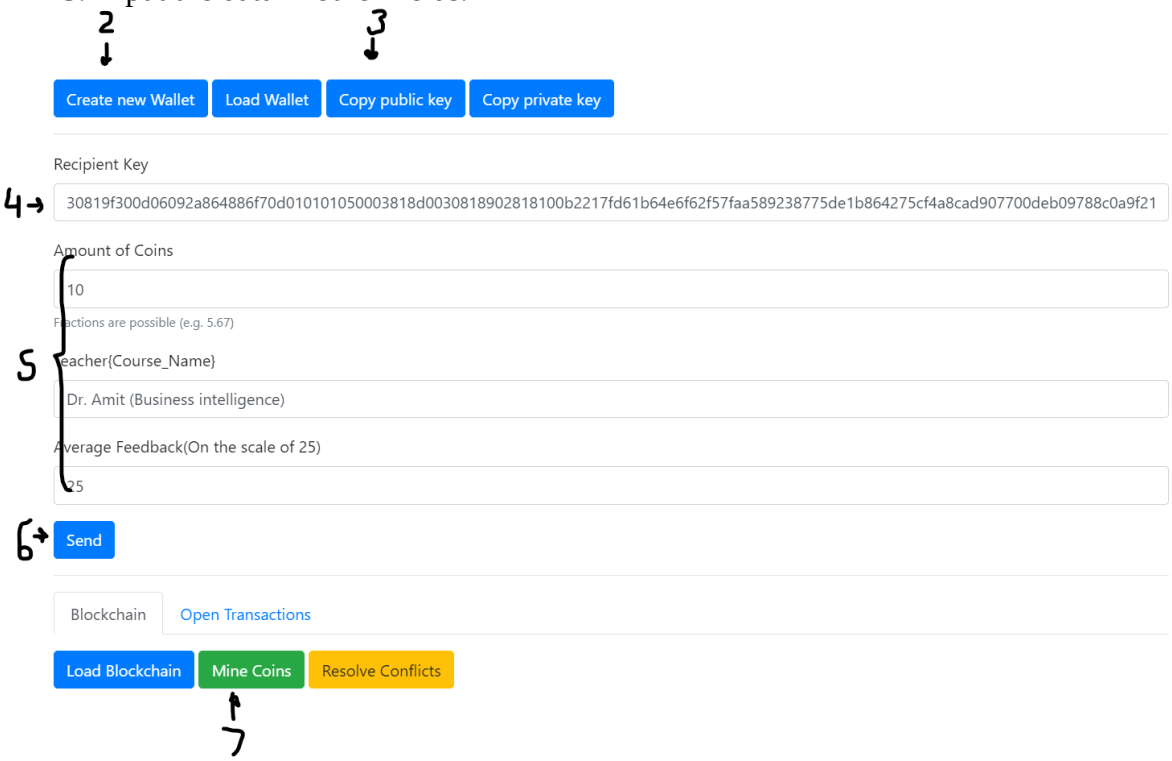
6. Once done, The .xlsx file (Tabular result) and .pdf file (graph) will get saved to the same folder.



Steps for how to use this software solution phase-2

Pre-requisites: Internet connection (As blockchain solution is hosted online on a webserver)

1. Go to http://collegeblock.pythonanywhere.com/, click on the login button.
    1. Username and password are "a"
2. Click on "Create new wallet", if you are a new user else click on "Load Wallet"
3. Copy the public key by clicking it on the "Copy public key" button.
4. Paste the key in the "Recipient Key" field.
5. Input the data in other fields.



6. Click the "Send" button.
7. Click the "Mine Coins" button.
8. And data get mined.

To view mined blocks click the "Load Blockchain" button.