



LYU1901

Anonymous online course evaluation

CENG4999 FINAL YEAR PROJECT PRESENTATION

STEVEN YAU & LUTHER LUI PRESENT

SUPERVISED BY PROF. MICHAEL LYU

Objective

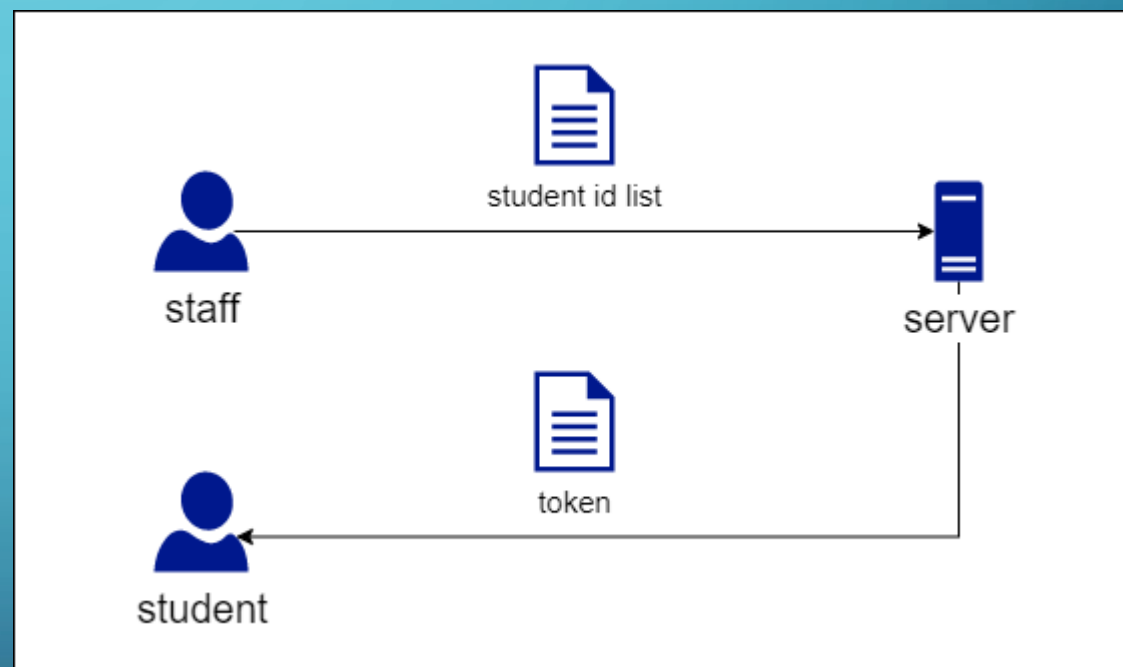
- Teachers and officers cannot track the identity of evaluation participants
- Participants validation
- Data encryption
- Web user interface

The image features a dark blue gradient background with white circuit-like lines in the corners. These lines consist of straight paths that branch out and terminate in small circles, resembling a stylized PCB or network diagram. The lines are most prominent in the top-left, bottom-left, and bottom-right corners, with a few lines also visible in the top-right corner.

Design

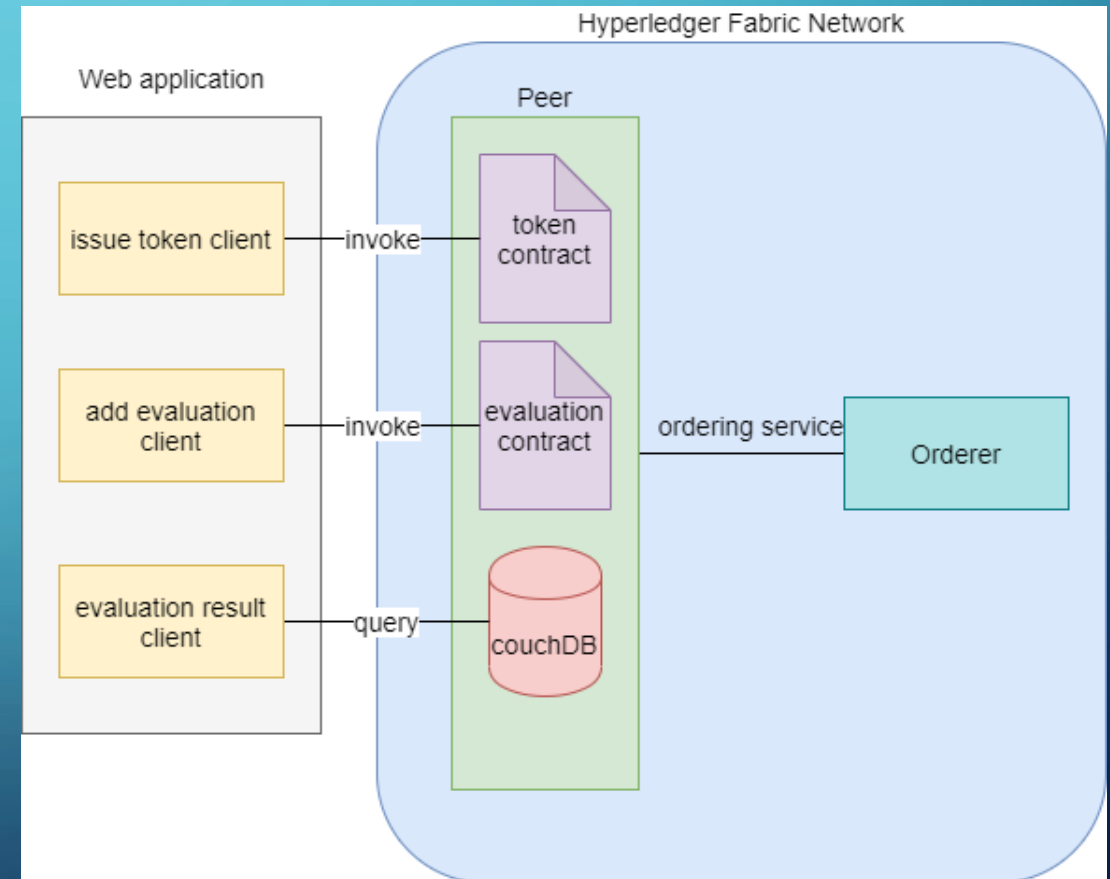
Token validation

- Random generated token
- No token owner record
- Distribute through email
- Mark the used tokens



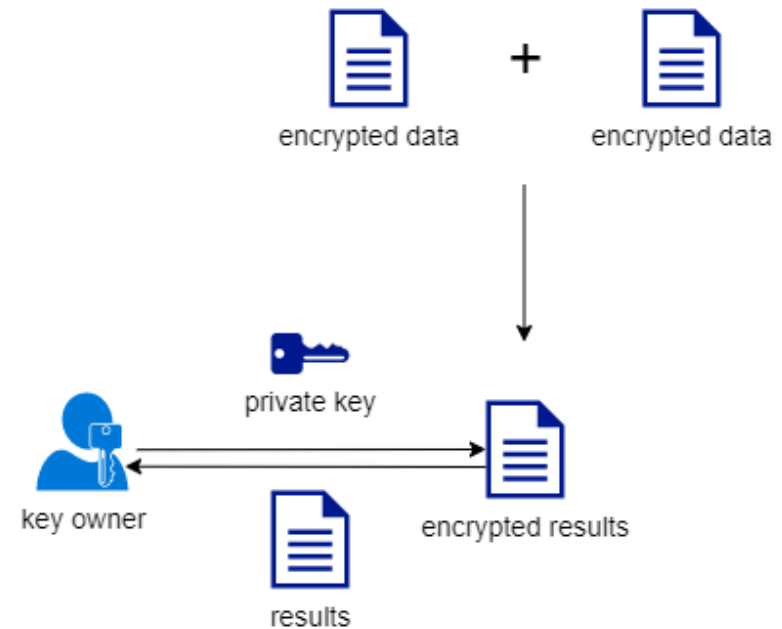
Hyperledger fabric

- Invoke smart contract through web app
- Query or update data with the contract response



Data encryption

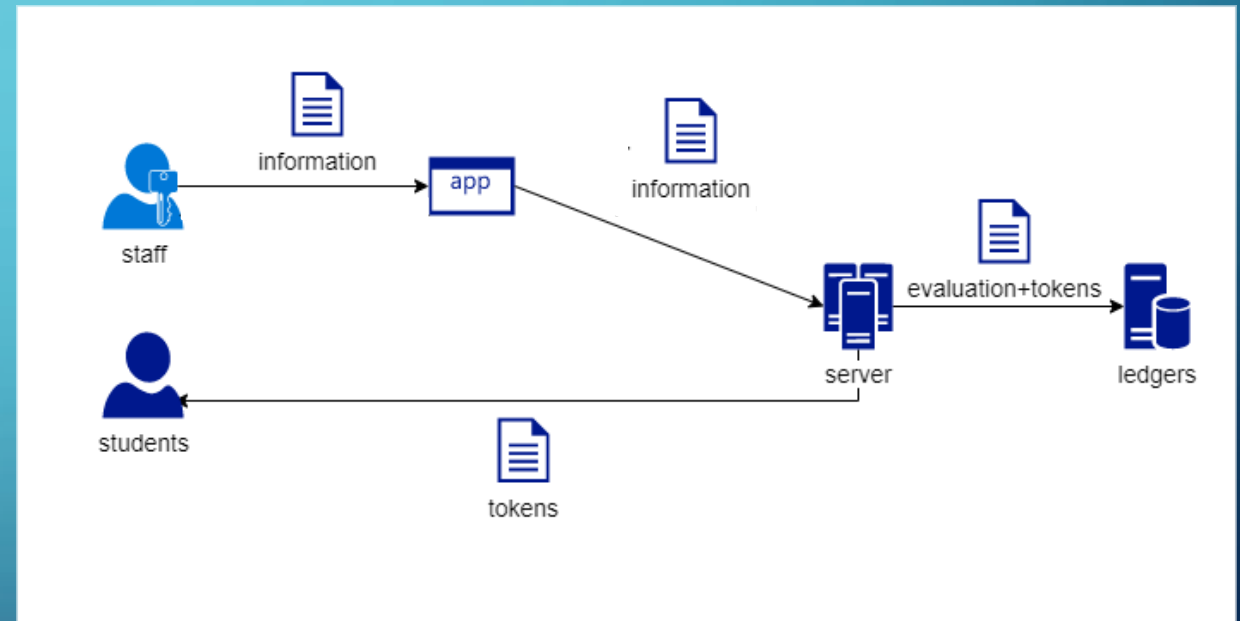
- Additive ElGamal encryption
- Tally with encrypted data
- Teachers/officers keep private key



Implementation

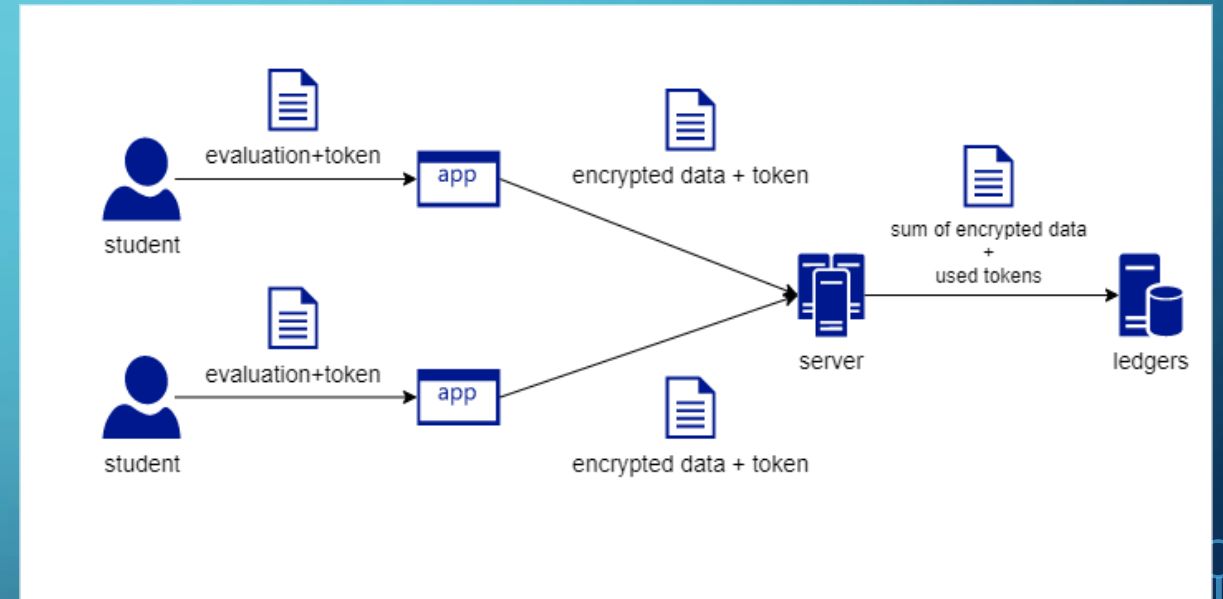
System workflow

- Staff provide information for creating evaluation
- System distribute tokens to students



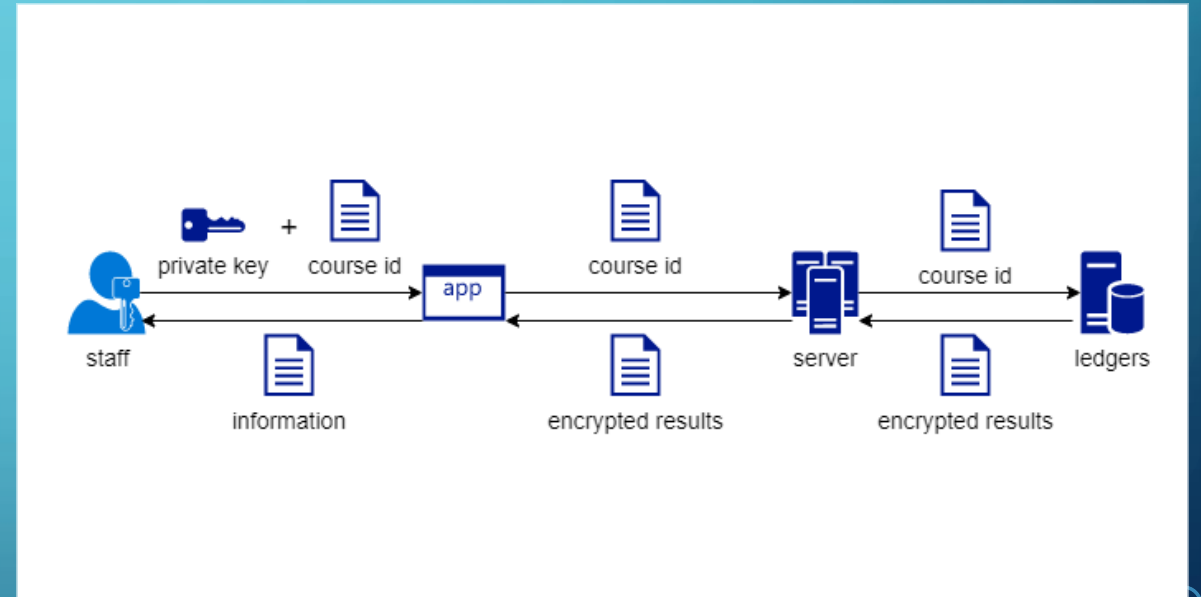
System workflow

- Students spend tokens to submit evaluation
- Sum encrypted evaluation data
- Store the data and used tokens in ledgers



System workflow

- Staff decrypt the results with private key
- Local decryption



Evaluation form

- a. My faculty: ART BAS EDU ERG LAW MED SCI SSC OTHER
- b. Level: Undergraduate Postgraduate Other
- c. Year of study: Year 1 Year 2 Year 3 Year 4 Year 5 Year ≥6
- d. This course is (select one): Major Required Major Elective Minor Elective U Core (GE, Lang, PE, IT) N/A
- e. Sex: Male Female
- f. Primary spoken language used in class: English Cantonese Putonghua Others
- Fraction of class time the primary language was used: 51-60% 61-70% 71-80% 81-90% 91-100%
- Supplementary language(s) (can select more than one): English Cantonese Putonghua Others N/A
- g. Hours per week spent on this course outside class: 0-2.0 2.1-4.0 4.1-8.0 8.1-12.0 12.0+ N/A
- h. Expected grade in the course: A A- B+ B B- C+ or below N/A

Clarity of Explanation 解釋清楚

1. The teacher presented in a clear manner. 老師表達清晰
2. The teacher used relevant examples to assist my learning. 老師運用適當例子，有助學習

Enthusiasm and Communication 熱忱與溝通

3. The teacher was enthusiastic about teaching. 老師熱心教學
4. The teacher encouraged active participation in class. 老師鼓勵學生積極參與課堂活動
5. There was effective communication between teacher and students. 師生溝通良好

Motivation 學習興趣

6. The course was interesting. 本科富有趣味性
7. The course was stimulating. 本科富有啟發性
8. The course enhanced my knowledge in this subject. 學習本科能增進我對本科目的認識

Learning Outcomes and Organisation 目標及組織

9. The course was well-organised. 本科編排恰當
10. Learning outcomes of the course were clear. 本科的學習目標清晰

Assessment 評核

11. Assessment methods were appropriate. 評核方法適當
12. The amount of workload required was appropriate. 要求的作業份量合適
If your answer is 1, 2 or 3 to Q12, 如第 12 題答案為 1、2 或 3
I found the amount of work required for assessment 我認為要求的作業份量: Too Much 太多 Too Little 太少

Course Difficulty 科目難度

13. Recommended readings were useful. 推薦書目很有用
14. Course content was of appropriate difficulty. 本科內容深度適中
If your answer is 1, 2 or 3 to Q14, 如第 14 題答案為 1、2 或 3
I found the course content 我認為本科內容: Too Difficult 太深 Too Simple 太淺

Learning Support 學習資源支持

15. The course was well supported by library resources. 圖書館有足夠資源支持本科的學習
16. The course was well supported by IT resources. 大學有足夠的資訊科技資源支持本科的學習

Overall Opinion 總評

17. Overall, I am satisfied with the course. 整體而言，我對本科感到滿意
18. Overall, I am satisfied with the teacher's performance. 整體而言，我對本科老師的教學表現感到滿意

Please answer the questions at the back of the page. 請填寫背面的問題。

Strongly Disagree 非常不同意	Disagree	Neutral	Agree	Strongly Agree 非常同意	N/A 不適用
1	2	3	4	5	6

1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Evaluation Form

Basic Information

My faculty: ART BAS EDU ERG LAW MED SCI SSC OTHER

Level: Undergraduate Postgraduate Other

Year of study: Year 1 Year 2 Year 3 Year 4 Year 5 Year ≥6

This course is (select one): Major Required Major Elective Minor Elective U Core (GE, Lang, PE, IT) N/A

Sex: Male Female

Primary spoken language used in class: English Cantonese Putonghua Others

Fraction of class time the primary language was used: 51-60% 61-70% 71-80% 81-90% 91-100%

Supplementary language(s) (can select more than one): English Cantonese Putonghua Others N/A

Hours per week spent on this course outside class: 0-2.0 2.1-4.0 4.1-8.0 8.1-12.0 12.0+ N/A

Expected grade in the course: A A- B+ B B- C+ or below N/A

Clarity of Explanation

1. The teacher presented in a clear manner. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

2. The teacher used relevant examples to assist my learning. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

Enthusiasm and Communication

3. The teacher was enthusiastic about teaching. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

4. The teacher encouraged active participation in class. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

5. There was effective communication between teacher and students. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

Motivation

6. The course was interesting. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

7. The course was stimulating. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

8. The course enhanced my knowledge in this subject. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

Learning Outcomes and Organisation

9. The course was well-organised. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

10. Learning outcomes of the course were clear. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

Assessment

11. Assessment methods were appropriate. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

12. The amount of workload required was appropriate. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

If your answer is 1, 2 or 3 to Q12, 如第 12 題答案為 1、2 或 3
I found the amount of work required for assessment Too Much Too Little

Course Difficulty

13. Recommended readings were useful. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

14. Course content was of appropriate difficulty. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

If your answer is 1, 2 or 3 to Q14, 如第 14 題答案為 1、2 或 3
I found the course content Too Difficult Too Simple

Learning Support

15. The course was well supported by library resources. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

16. The course was well supported by IT resources. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

Overall Opinion

17. Overall, I am satisfied with the course. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

18. Overall, I am satisfied with the teacher's performance. Strongly Disagree Disagree Neutral Agree Strongly Agree N/A

The image features a blue gradient background with white circuit-like lines in the corners. These lines consist of straight paths that branch out and terminate in small circles, resembling a printed circuit board layout. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

Demo

The image features a dark blue gradient background with white circuit-like lines in the corners. These lines consist of straight paths that branch out and terminate in small circles, resembling a stylized PCB or network diagram. The lines are positioned in the top-left, top-right, bottom-left, and bottom-right corners, framing the central text.

Future improvement

Performance improvement

- Better encryption algorithm
- Data handling method



Q&A