Read & Grow: Mobile Reading Application for Elementary School Learners

An IT Capstone Project Proposal
Presented to the Faculty of the
College of Information and Computing Sciences
Zamboanga Peninsula Polytechnic State University

In Partial Fulfillment of the Requirements
for the degree in Bachelor of Science in Information Technology

• Check computation
F & quiz
• Printable Results
• Add acceptance

By:
Arjec Jose A. Dizon
Algeo L. Fernandez
Sherwin T. Gelig Jr.
Kristian T. Gomez

9:00 Am
Dec. 17, 2025

ADRIAN B. MARTIN, MIT, Ph.D.
Adviser

Socorro S. Lozada Ph.D.

December 2025

ACKNOWLEDGEMENT

First and foremost, we express our heartfelt gratitude to **ALMIGHTY GOD** for bestowing wisdom, power, and direction throughout the endeavor. His continuous support, blessing, and the backing of the Holy Spirit allowed the successful completion of this endeavor.

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Ph. D

We would also want to thank our mentor, **Rodlen** for sharing her talents and ideas that improved our work.

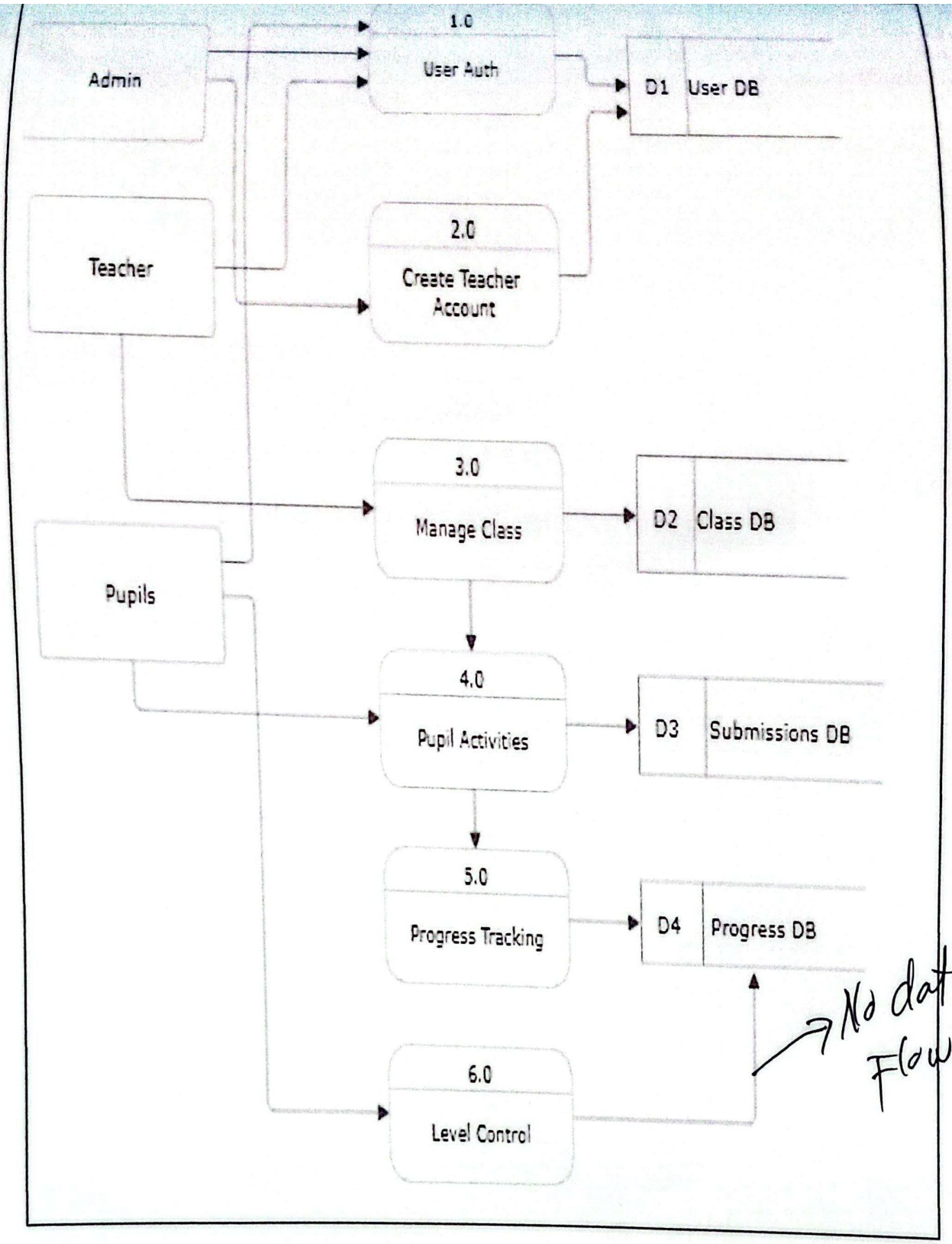
Finally, we want to express our heartfelt gratitude to **OUR FAMILY, RELATIVES, FRIENDS, CLASSMATES, AND SCHOOLMATES** for their moral support, patience, and understanding during the challenging periods of our academic journey.

The above-mentioned help and support from all the people have been the reason behind the successful completion of this project.

The Proponents

Before Binding check by your critic Reader

Font size 12
Arial Letters


1.0
User Auth
Admin
D1 User DB
Teacher
2.0
Create Teacher Account
3.0
Manage Class
D2 Class DB
Pupils
4.0
Pupil Activities
D3 Submissions DB
5.0
Progress Tracking
D4 Progress DB
6.0
Level Control
No data Flow

remediation, and progress monitoring.

Not Accurate! ?

System Testing

System testing was conducted at Sta Maria Central School with 55 participants: five (5) teachers and fifty (52) pupils from Grades 1-5. The researchers gathered and thoroughly analyzed individual feedback. Any identified limitations were addressed with necessary modifications and improvements. To resolve system inefficiencies, the development team collected data from this diverse group to formulate a new plan for achieving their goals. This testing provided valuable insights into the user experience. The process of collating data from a single-classroom sample—one teacher and ten pupils helped deepen the proponents' understanding of the system's intended users.

→ Include the process on how you compute the result of mean,

Numeric Value		Descriptive Rating	
5	-	Very Strongly Agree	4.21 – 5.00
4	-	Strongly Agree	3.41 - 4.20
3	-	Agree	2.61 – 3.40
2	-	Disagree	1.81 – 2.60
1	-	Strongly Disagree	1.00 - 1.80

Table 4.4.3: Pupil Evaluation in terms of Usability and Navigation (Mean Scores)

INDICATORS	MEAN	DESCRIPTIVE RATING	INTERPRETATION
1. Is it easy to find the stories/books you want to read?	4.4	Strongly Agree	Very High
3. Are the buttons big enough to tap easily?	4.1	Agree	High
Overall Mean	4.2	Agree	High

Legend: 4.21 – 5.00 (Strongly Agree), 3.41 – 4.20 (Agree), 2.61 – 3.40 (Neutral), 1.81 – 1.00 – 1.80 (Strongly Disagree)

As shown in Table 4.4.3, in terms of usability and navigation, the student evaluation provided an overall mean of 4.2, which was interpreted as "high" and descriptively defined as

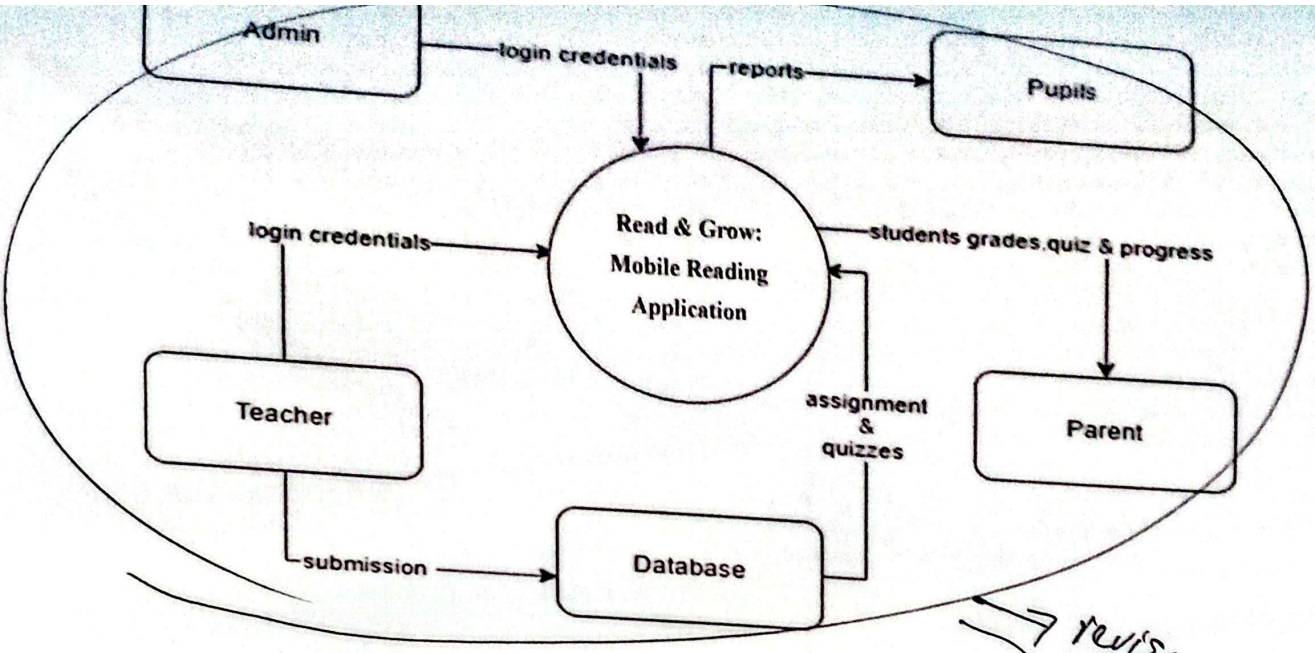


Figure 4.3.3 Level 0 Data Flow Diagram - Context Diagram

revise context diagram

This description should be the context!

Data Flow Diagram

The Data Flow Diagram (DFD) of Read & Grow mobile reading application illustrates the interactions of Admin, Teacher, Pupil, and Parent with the main processes and databases of the system. User Authentication (1.0) is the first process all users go through and at this point, their credentials are verified against the User Database (D1). Creation and management of accounts is done by the process Create Teacher / Sign-in Pupil, Parent Account (2.0), where the information is also stored in D1. Teachers perform class management and pupil assignments via Manage Class (3.0), where the data is written in the Class Database (D2). Pupils are involved in reading activities through Pupil Activities (4.0) and all that is done is recorded in Submission Database (D3), which parents can have a view of.

Activity data are evaluated in Progress Tracking (5.0) initially to determine student performance and reading progress, and the results are kept in the Progress Database (D4) which is accessible by teachers, parents, and administrators. Level Control (6.0) takes data from D4 to either open or limit learning levels, and the updated progress is sent back to D4. The DFD thus depicts a

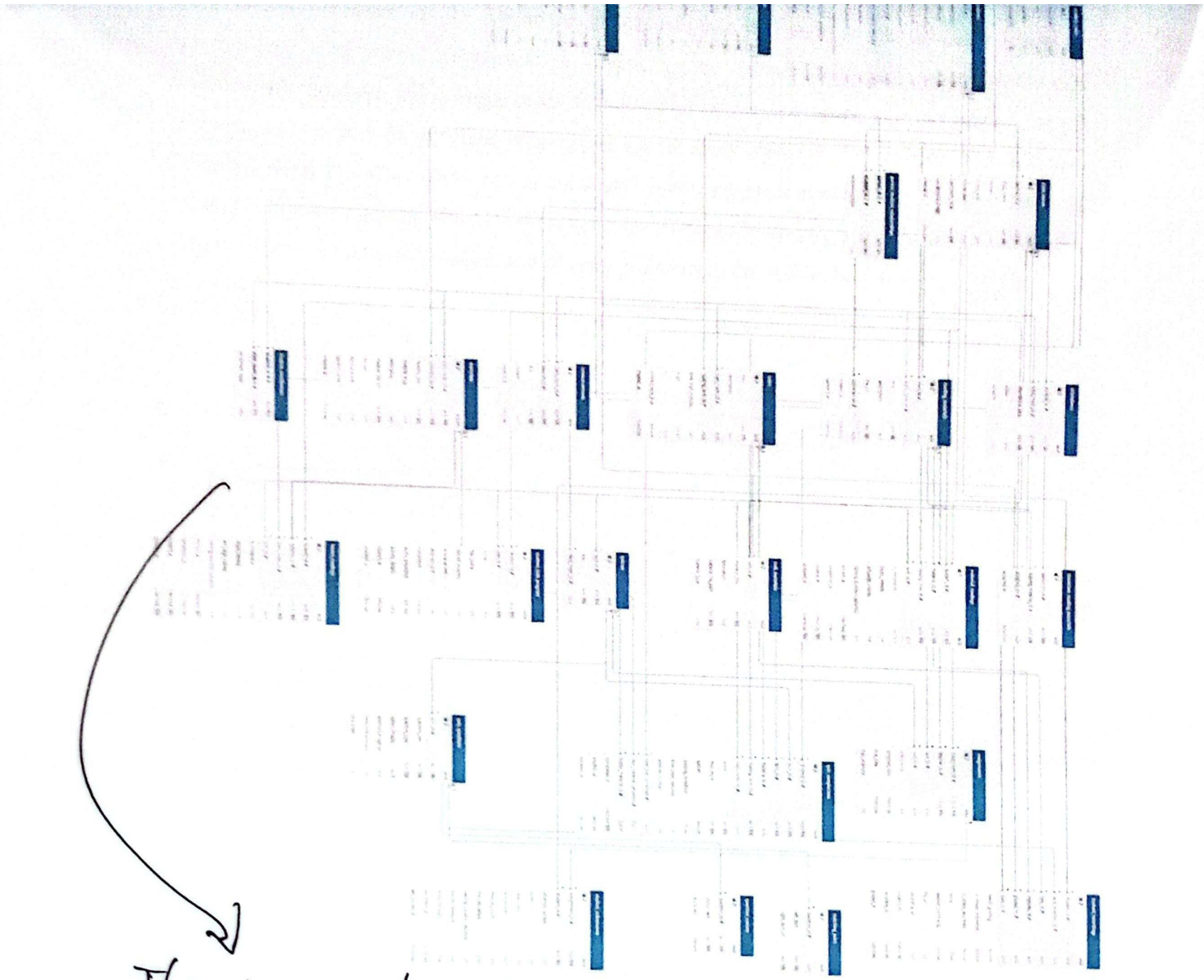


Figure 4.3.5 Crow's Foot Entity-Relationship Diagram

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* check your clients if the computation of Quizes is correct.
* Correct answer should be color green & Incorrect answer should be color red.
* Remove Review button if the quiz is on going & display it if the result is display.
* Matching Option only one should be selected.
* print Reports for Quizes & Activities

ADRIAN B. MARTIN, MIT, Ph.D.
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Paterno B. Iogapan Jr., MIT

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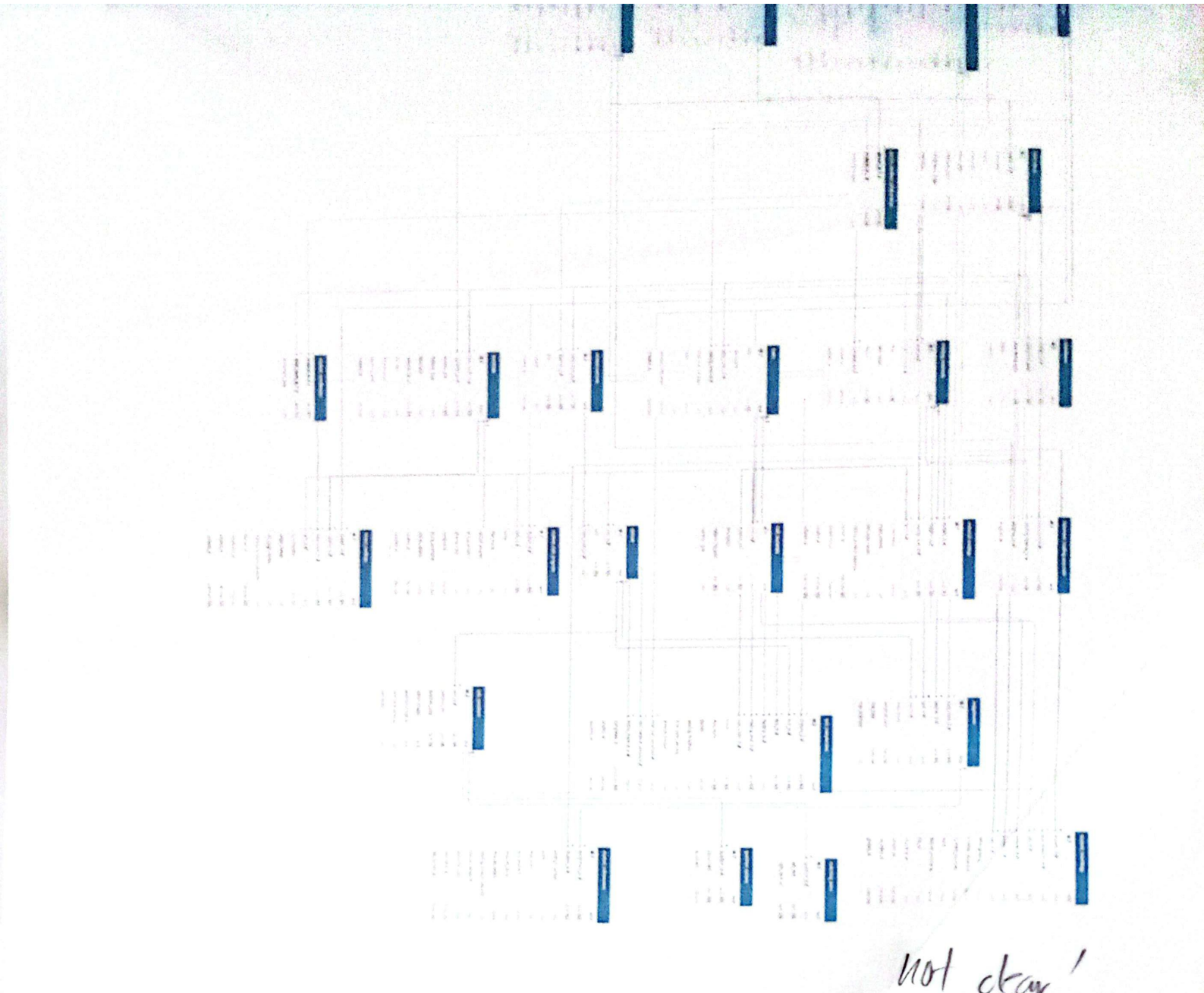

not clear!

Figure 4.3.5 Crow's Foot Entity-Relationship Diagram