

Project proposal

Crowd quizmaker

by

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<https://github.com/ChayanonPitak/261361-Project/>

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Team profile

- **Chayanon Pitak** as Project Manager and System Analyst

Skills

- **Web application development** on JavaScript, Typescript, React.js, Solid.js, PHP, TailwindCSS.
- **Software development** on Java, C, C++.
- **Game development** on Unity using C#.

Experience

- Mostly college projects and personal projects.

- **Kritsanaphong Tepweerakul** as Developer and Business Analyst

Skills

- **Web application development** on JavaScript, Typescript, React, TailwindCSS, PHP, Laravel.
- **Software development** on C, C++, C#, Java, Python.
- **Game development** on Spring boot/React Web-based Game, Unity.

Experience

- SFML 2D-RPG Game.
- CARIN. (Strategy-Game Project)
- Gogoboard Automatic Watering.
- Store Website.

- **Woranut Kitchakan** as Developer and Designer
- **Kitpisan Tanngan** as Tester and Designer
- **Nadtaphong Jandaboot** as Tester and Designer
- **Suwat Inkaew** as Tester

Crowd quizmaker

Students and lecturers generate quiz and answers. Quizzes can be edited, commented, voted and rated (e.g. quiz-maker)

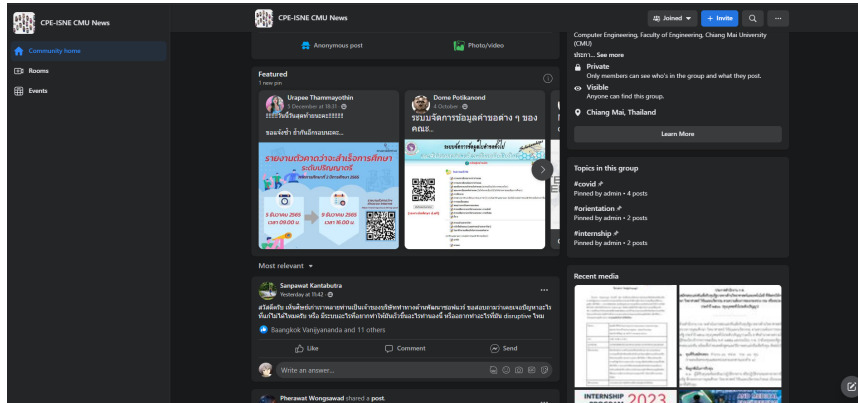
Problem statement

Nowadays "Social network" is very popular for people to hang out on, they can see what their follower are doing, they can interact with follower and they can share their own content.

But there is no "Examination Social Network" yet. Which can be a way to evaluate student's knowledge and let them to compete with each other that also fun for the student. For example, in the past Internet and Online Community course (261111) have a traditional examination, which is boring and not interactive. But if we have a "Examination Social Network" that can be a way to evaluate student's knowledge and let them to compete with each other that also fun for the student.

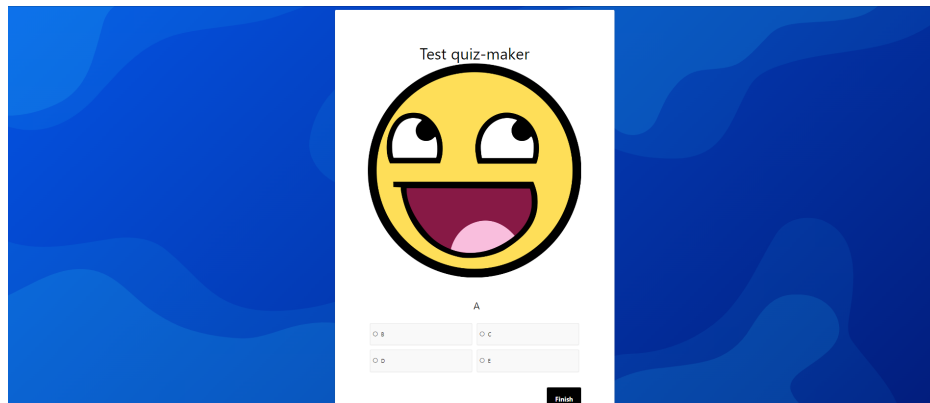
Solution

Facebook group



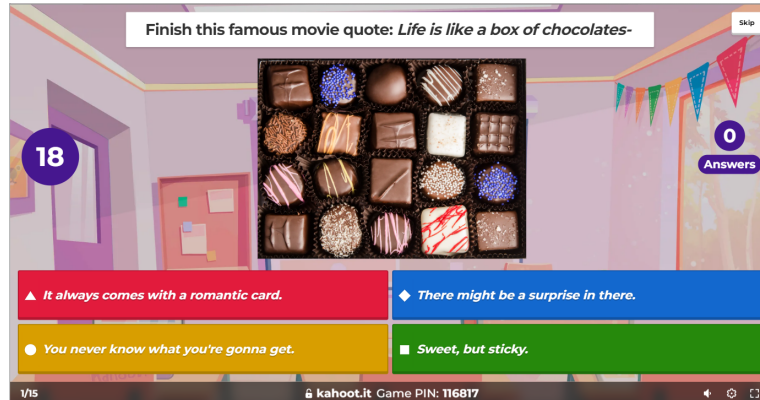
Facebook group is a group platform created by Meta. It let people with same interest to gather or lecturer can communicate with student. Also it is a way to let people create post (including quiz) and interact with each other. But it cannot evaluate student performance nor quiz quality and managing posts into topics/quizzes is very hard or impossible to do.

Quiz-maker



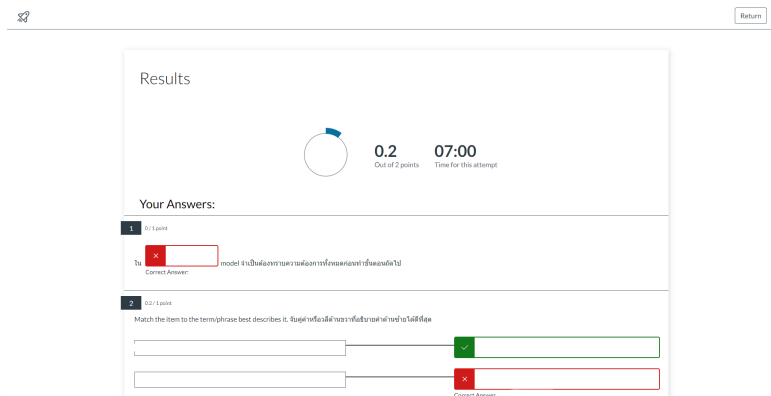
Quiz-maker is a quiz creation platform. User can create quizzes of their own topic and share to others. It have great evaluation but lack of interaction and quizzes quality review from other users is impossible.

Kahoot!



Kahoot is a game-based learning platform. It let lecturer create questions according to topics and student can synchronously answer the questions with intensive environment. It have great evaluation and fun. But students cannot contribute their own quiz to existing quizzes.

Learning managment syatems (LMS) - Moodle, Blackboard, Canvas, etc.



Learning management system (LMS) is an application that automates the administration, tracking, and reporting of training events.¹ It have great evaluation and grading, but quizzes looks like traditional examination.

¹Ryann K. Ellis, Field Guide to Learning Management Systems, Learning Circuits, 2009, p.1

Contribution

In general, quiz is created by one person or one group. It makes the number of quiz and variety of quiz is low. We have an inspiration of Facebook group which everyone in the groups can contribute to a topic, which will increase the variety and number of quiz. The process of creating quiz is as follows: define questions, define choices, define correct answers, have a system that can comment or vote on the quiz created by others to review the quality and correctness of the quiz, have a system that can evaluate the quality of the quiz.

Comparison to existing solutions

- Facebook groups

	Facebook group	Our solution
Quiz creation	Creating posts	Creating quizzes with defined format
Quiz contribution	Everyone in group or group moderator approval	Defined by subject creator
Quiz validation	-	Pre-defined format
Quiz quality review	Reactions and Comments	Pre-defined rubrics
User evaluation	Manually	User dashboard

- Quiz-maker

	Quiz-maker	Our solution
Quiz creation	Creating quizzes with defined format	Creating quizzes with defined format
Quiz contribution	Quiz creator	Defined by subject creator
Quiz validation	Pre-defined format	Pre-defined format
Quiz quality review	-	Pre-defined rubrics
User evaluation	User dashboard	User dashboard

- Kahoot!

	Kahoot!	Our solution
Quiz creation	Creating quizzes with defined format	Creating quizzes with defined format
Quiz contribution	Quiz creator	Defined by subject creator
Quiz validation	Pre-defined format	Pre-defined format
Quiz quality review	Stars rating	Pre-defined rubrics
User evaluation	User dashboard	User dashboard
Synchronous activity	✓	✓

- Learning management system

	LMS	Our solution
Quiz creation	Creating quizzes with defined format	Creating quizzes with defined format
Quiz contribution	Quiz creator	Defined by subject creator
Quiz validation	Pre-defined format	Pre-defined format
Quiz quality review	-	Pre-defined rubrics
User evaluation	User dashboard	User dashboard

Stakeholder and User groups

- **Product Owner**

- Professor Kampol Woradit as Internet and Online Community course lecturer.
- Professor Sakgasit Ramingwong as Internet and Online Community course lecturer.

- **Study purpose**

- Lecturers
- Students

- **Entertain purpose**

- Quiz Makers
- Who want to take advantage from their free time
- Who is interested in specific purpose
- Content creator who want to created content based on fan-quizzes

Technology feasibility study

We will create web application which is cross-platform friendly that can be use on mostly any device.

Tool and resources used

- Figma for UI/UX design.
- Swagger for API design.
- diagrams.net for database design.
- HTML/CSS for web markdown and styling.
- Typescript for backend
- React.js for frontend framework.
- MySQL for database system.
- Prisma for database orm.

Conclusion

We will create cross-playform web application that's looks like combination of Facebook groups and LMS, which lets user gather in groups and create quizzes together. Also users can review and rated quizzes quality.

We will separate into two user groups.

- For **Lecturer and student**, lecturer can create and subject topic and let student create quizzes related to that topic. After that student will take each other quizzes to test their knowledge and rate their quizzes quality. This method make the quizzes become larger and more accurate for that subjects that student also have fun.
- For **Fans**, they can create quizezs related to their favorite topic and let others to contribute that topic.

Appendix

A1 - responsibility

- **Suwat Inkaew 610610521** (2%) - Self profile.
- **Kritsanaphong Tepweerakul 630610714** (41.58%) - Self profile, Stakeholder interview (Proj. Kampol Woradit), Contribution section, Stake holder and User groups section.
- **Kitpisan Tanngan 630610716** (2%) - Self profile.
- **Chayanon Pitak 630610724** (50.42%) - Document setup, Self profile, Stakeholder interview (Prof. Sakgasit Ramingwong), Problem definition, Alternatives purpose, Technology definition, Conclusion.
- **Nadtaphong Jandaboot 630610743** (2%) - Self profile.
- **Woranut Kitchakan 630610760** (2%) - Self profile.

A2 - Responsibility percentage calculation

Activities that not directly contribute to the documentclass

- Stakeholder interviewing 10%

Activities that is directly contribute to the documentclass

- Document setup 0%
- Self profile 2%
- Other large section 8.86%