

**THE ACADEMY OF SCIENCES OF TURKMENISTAN OGUZ HAN
ENGINEERING AND TECHNOLOGY UNIVERSITY OF
TURKMENISTAN**



Computer Sciences and Information Technologies Faculty Computer
Sciences and Information Technologies Department

Solve math problems through a mobile app

GRADUATION THESIS

Author: Guwamch Haldurdyev

Project supervisor: Eziz Kakyshov

THE ACADEMY OF SCIENCES OF TURKMENISTAN

**OGUZ HAN ENGINEERING AND TECHNOLOGY
UNIVERSITY OF TURKMENISTAN**

Computer Sciences and Information Technologies Faculty Computer

Applied Mathematics and Informatics department

GRADUATION THESIS (PROJECT)

DESCRIPTION

Topic of the graduation thesis (project):
Solve math problems through a mobile app

Student: Guwanch Haldurdyev
(full name)

Supervisor: **Eziz Kakyshov**

(full name, degree)

Advisors on the chapters of the thesis (project):

1.
(full name, degree)

2. Gulshat Orazdurdyeva
(full name, degree)

3. Enar Populova
(full name, degree)

4. Oguljan Gawirova
(full name, degree)

Head of the department: Eziz Kakyshov
(full name, degree)

Review author: Eziz Kakyshov, Head of the Applied Mathematics and Informatics
Department of Oguz Han Engineering and Technology University of Turkmenistan
(full name, degree, place of employment and position)

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UNIVERSITY OF TURKMENISTAN
Computer Sciences and Information Technologies Faculty
Computer Sciences and Information Technologies Department
Major of Information systems and technologies**

“Approved by”

Head of the department _____

Date “_____” _____ 2022 year

THE STUDENT THESIS (PROJECT)

ASSIGNMENT

Guwanch Haldurdyev

(full name)

1. Name of the graduation thesis (project): Solve math problems through a mobile app
No. B _____ / _____ issued on „_____”th of _____ in 20____.
2. Deadline of the student thesis (project): 25.05.2024 y
(date and month)
3. Information (conditions) necessary for the preparation of the thesis (project)
 - 1) Mathematic concepts, Guidelines, References.
 - 2) Solve math problems through a mobile app
 - 3) Programming languages applications
4. Content (names of the chapters and content) of the thesis (project):
 - 1) Introduction
 - 2) Common uses of Dart framework Flutter
 - 3) The need for a mobile app that solves math problems
 - 4) Current mobile apps or software that address similar problems
 - 5) “Solve math problems through a mobile app” application source code
 - 6) Conclusion
 - 7) Recommendation
 - 8) References

5.Content of drawings (indicate the names of the required drawings):

6. Information on the advisors of the thesis (project)

Full name and academic degree of an advisor	Place of employment and position	Date of assignment from the advisor	Date of the acceptance of the assignment by the student (date and signature)
Kakyshev Eziz	Applied Mathematics and Informatics Department,lecturer	08.10.2023y	08.10.2023y
Owezov Halmuhammet	Applied Mathematics and Informatics Department,lecturer	10.12.2023y	13.12.2023y
Bekiyeva Maral	Applied Mathematics and Informatics Department,lecturer	15.12.2022y	30.12.2022y
Batyrova Ogulbabek	Applied Mathematics and Informatics Department,lecturer	11.02.2023y	13.02.2023y

7. Date of the assignment „ _____ ” ____ of _____ 20 _____

Supervisor of the thesis (project): _____
(signature)

To be performed by : _____
(signature)

8. Monthly-daily plan of the thesis (project)

No.	Names of the chapters of the thesis (project)	Time period (dates) of the completion of the chapters of the thesis (project)	Remarks of the supervisor about the development process of the thesis
1	Introduction	05.11.2022-12.11.2022y	Done
2	Common uses of Dart framework Flutter	19.11.2022-03.12.2022y	Done
3	The need for a mobile app that solves math problems		
4	Current mobile apps or software that address similar problems		
5	“Solve math problems through a mobile app” application source code		
6	Conclusion		
7	Recommendation		

Student signature_____

Supervisor signature_____

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Computer Sciences and Information Technologies Faculty
Applied Mathematics and Informatics Department

FEEDBACK

Student-author of the project: Haldurdyev Guwanch
(full name)

Topic of the project: “Solve math problems through a mobile app“

Profession: Applied mathematics and informatics

Volume of the graduation project:109

Number of drawings:

Number of pages of description:5

1. Summary of the graduation project: The project aims to address the need for a mobile solution to mathematical problem-solving, providing a user-friendly app with efficient algorithms and a well-designed interface. The iterative testing and evaluation phases ensure user satisfaction and pave the way for future enhancements.
2. Advantages of the graduation project: a)Accessible Learning: The app provides a readily available resource for students to solve math problems at any time, fostering independent learning. b)Quick Assistance: Users can receive instant help with complex problems, promoting a deeper understanding of mathematical concepts.

Readiness of the graduation project: The mobile app allows users to solve math problems wherever they are, catering to the modern, mobile lifestyle. Users can access the app at any time, eliminating the constraints of traditional learning hours.

4. Description of the general preparation of the student: The relevant requirements of student's preparation to the course project are fully satisfied. Project proposal was very impressive.

5. The main disadvantages of the graduation project are: In the students graduation project there are some grammatical mistakes, but implementation of the projet itself is good and mistakes does not reduce the delivery quality.
6. Ability to put into practice or present the results of the graduation project and its sections for production: Results obtained during the graduation project can be used invarious sectors of our country, for example in educational field sector.
7. Technical and theoretical training of the future specialist: Technical and theoretical preparation of the student Guwanch Haldurdyev are excellent and great. The degree of readiness of the graduation project to be submitted to the state test team and the evaluation of the observer: The theme “Solve math problems through a mobile app” implemented in graduation project of student Guwanch Haldurdyev fully satisfes requirements of course projects of technical high educational institutions.

Supervisor Eziz Kakyshov
(place of employment, position, full name, signature)

Oguzhan Engineering and Technology University of Turkmenistan Head of Computer
Sciences and Information Technologies Department

_____ 20 y.

**THE ACADEMY OF SCIENCES OF TURKMENISTAN OGUZHAN
ENGINEERING TECHNOLOGY UNIVERSITY OF TURKMENISTAN
REVIEW OF THE GRADUATION PROJECT**

Student – author of the graduation project: Guwanch Haldurdyev
(full name)

Topic of the graduation project: “Solve math problems through a mobile app”

Specialty: Applied mathematics and informatics

Volume of the graduation project: 10

Number of the drawings:

Number of pages of description:

Number of the pages of the content:

1. Significance of the thesis topic and accepted solutions: The decisions taken in the graduation project demonstrates the management of Development of «Solve math problems through a mobile app» in our country during the transition to the digital economy and the development of appropriate software.
2. Justification of the solutions in the graduation project (properties and use of achievements of leading experience, science and technology, manufacturing):
Development of «Solve math problems through a mobile app» project is a application, the security side is strong and the app provides a readily available resource for students to solve math problems at any time, fostering independent learning that can help students develop a deeper understanding of its applications
3. Level and quality of drawings and content chapters: The level of execution of the graduation project drawings and components fully meets the requirements of the course for technical higher education institutions.
4. Quality of the economic part of the graduation project: The level of implementation of the graduation project's economic department needs the relevant requirements
5. Main drawbacks of the graduation project: In the students graduation project there are some grammatical mistakes, but implementation of the projet itself is good and mistakes does not reduce the delivery quality.

6. Opportunities to submit for publication or to integrate the graduation project and its chapters into the manufacturing: Results obtained during the graduation project can be used in various sectors of our country, for example in educational field sector.

7. Technical and theoretical training of the future specialist: Technical and theoretical of the student Guwanch Haldurdyev are excellent and great.

8. Level of readiness of the graduation project for presenting to the state examination committee and the evaluation grade of the reviewer:

Student Guwanch Haldurdyev's "Solve math problems through a mobile app" project fully meets the requirements of graduation projects in technical universities.

Author of the review: Eziz Kakyshov
(academic degree and full name)

Oguzhan Engineering and Technology University of Turkmenistan
(place of employment)

Applied Mathematics and Informatics Department
(specialty, position)

(signature)

„____” _____ 2023

**THE ACADEMY OF SCIENCES OF
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TECHNOLOGY UNIVERSITY OF
TURKMENISTAN**

Faculty

department

SOUND

Student – author of the graduation project: Guwanch Haldurdyev
(full name)

Topic of the graduation project: “Solve math problems through a mobile app”

Volume of the graduation project: 10

Number of the drawings:

Number of pages of description:

1. Content of the graduation project: The project involves working with contemporary technologies and programming languages, contributing to the development of technical skills. Designing algorithms for efficient problem-solving enhances computational thinking skills.
2. Advantages of the graduation project: The app accommodates a range of math problems, from simple arithmetic to complex equations, enhancing its utility for various educational levels.
3. Preparation of the graduation project: The preparation of the graduation project is at high level.
4. Characterization of the student's overall preparation: Ready to defend her graduation project.

Leader:

Eziz Kakyshov

(place of employment, position, full name, signature)

Oguzhan Engineering and Technology University of Turkmenistan

(place of employment)

Head of Computer Sciences and Information Technologies Department

(specialty, position)

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