



TANSIQY

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Abstract

First Paragraph: *Introduction and Problem Statement*

TANSIQY is an innovative platform designed to streamline and enhance the educational selection process for Egyptian students. The platform addresses critical challenges such as misinformation, fragmented resources, and the lack of a centralized system for academic guidance. By providing accurate, verified data and personalized recommendations, TANSIQY empowers students to make informed decisions about their academic futures.

Second Paragraph: *System Features and Functionality*

The system integrates advanced algorithms, user-friendly design, and a comprehensive database to cater to diverse educational tracks, including General Secondary Education, Technical Diplomas, and Al-Azhar Education. Its intuitive interface ensures accessibility for students from all backgrounds, bridging regional disparities and promoting equity in access to reliable information. The platform also simplifies workflows, reducing the stress associated with academic planning.

Third Paragraph: *Impact, Validation, and Future Enhancements*

This document outlines the technical design, implementation, and validation of TANSIQY, demonstrating its ability to align academic choices with market demands and national educational objectives. Future enhancements include the integration of AI for advanced personalization, expansion to include international universities, and career guidance tools to support students in their long-term academic and professional goals.

Chapter 1 :

Introduction to TANSIQY

1.1 Overview of TANSIQY :

TANSIQY is an innovative platform designed to simplify the process of educational selection for students in Egypt. Its primary goal is to address the challenges posed by unreliable information and the overwhelming abundance of unverified websites. It provides students with a streamlined, trustworthy solution for making crucial academic decisions.

By focusing on user needs, **TANSIQY** aids in informed decision-making and contributes to reducing the stress and confusion associated with educational planning.

1.2 Objectives of the Program :

- **Combat Misinformation :**
 - Centralized and reliable information source eliminates confusion caused by conflicting data from various platforms.
 - Uses verification mechanisms and continuous updates from trusted academic resources.
- **Simplify User Experience :**
 - Intuitive, user-friendly interface designed for effortless navigation, even for less tech-savvy users.
- **Comprehensive Coverage :**
 - Supports a wide range of educational tracks, catering to students aiming for government universities, private institutions, or technical diplomas.

- **Encouraging Equity :**

- Equal access to accurate information for students of all backgrounds.

- **Long-term Impact :**

- Empowers students with accurate data, contributing to the national effort of improving education in Egypt.

Chapter 2 :

Targeted Audiences

2.1 Educational Levels Covered :

- **General Secondary Education (Thanaweya Amma) :**
 - **Tracks :** Science, Math, Literature.
 - Tailored recommendations for each track.
- **Al-Azhar Education :**
 - Specific options for Science and Literature tracks.
 - Curriculum integrated to accommodate unique challenges.
- **Technical Diplomas :**
 - Covers industrial, commercial, and agricultural fields.

2.2 Why These Groups ?

Ensures inclusivity and provides tailored options based on educational paths.

2.3 Demographics and Regional Outreach :

Tackles regional disparities, ensuring students in rural areas access high-quality information like their urban counterparts.

Chapter 3 :

User Journey

3.1 Initial Interaction :

Upon entering **TANSIQY** , users are presented with three options :

- General Secondary Education (Thānaweya Āmma)
- Al-Azhar Education
- Technical Diplomas

3.2 Decision Pathways :

- General Secondary Education :
 - Tracks :
 - Science : Medicine, Pharmacy, Science Faculties.
 - Math : Engineering, Computer Science, Applied Arts.
 - Literature : Law, Arts, Commerce.
- Technical Diplomas :
 - Industrial or Commercial tracks guide users to technical institutes.
- Al-Azhar Students :
 - Science : Islamic Studies, Medicine, Pharmacy.
 - Literature : Islamic Law, Arabic Studies.

3.3 Features Enhancing the User Journey

- Personalized Recommendations.
- Step-by-Step Guidance.

Chapter 4 :

Categories of Institutions

4.1 Available Institution Types :

- Government Colleges : Affordable, state-funded.
- Private Colleges : Modern facilities with higher costs.
- National Universities : Combines state and private-sector involvement.
- Private Institutes : Niche, specialized programs.
- Technical Institutes : Vocational training and skill development.

4.2 User Workflow :

- **Detailed information includes :**
 - Admission requirements.
 - Programs offered.
 - Tuition fees.

Chapter 5 :

Practical Examples

5.1 General Secondary Education Example :

A user selects the Math track under Thānaweya Āmma. The application displays relevant faculties such as :

- Engineering : Mechanical, Electrical, Civil.
 - Computer Science : Artificial Intelligence, Data Science.
 - Applied Arts : Architecture, Design.
- The platform highlights :
 - Entry requirements.
 - Potential career paths for each faculty.

5.2 Technical Diploma Example :

A student from an Industrial Diploma track can explore institutes like :

- Industrial Engineering Institutes : Specializing in automation and manufacturing.
- Vocational Training Centers : Offering short-term certifications for immediate employment.

5.3 Al-Azhar Example :

A student in the Science track can view options such as :

- Medicine : Special focus on Islamic ethics in medical practice.
- Pharmacy : Modern pharmaceutical studies integrated with traditional knowledge.
- Islamic Studies : Deepening understanding of Quranic sciences.

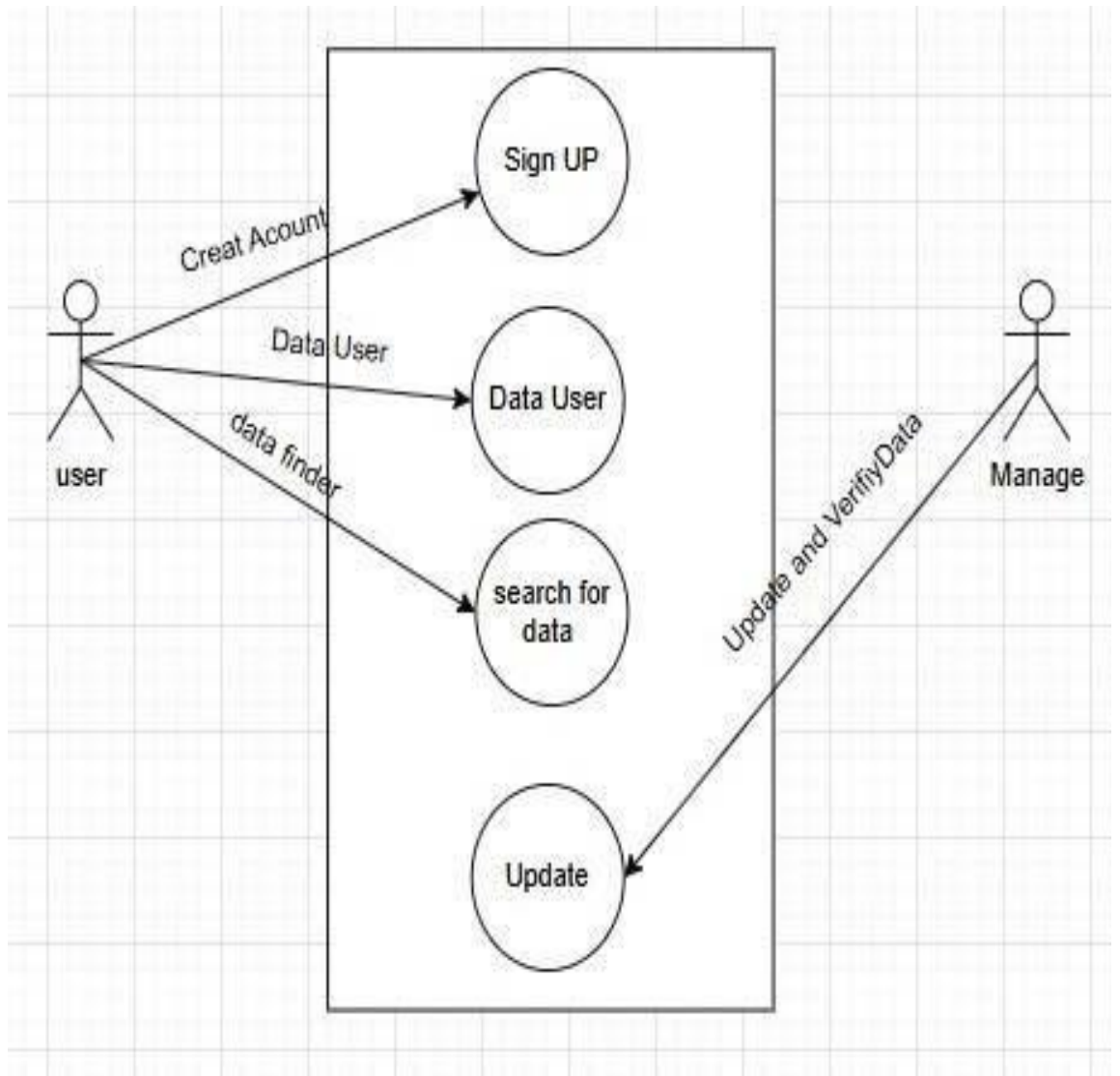
Chapter 6 :

Technical Design

6.1 Use Case Diagram :

The TANSIQY system includes as fg.(6.1) :

- **User Input Module** : Captures user choices.
- **Recommendation Engine** : Filters options based on user input.
- **Data Repository** : Stores up-to-date information about faculties and institutes.



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fg.(6.1)

6.2 Application Features :

- Dynamic Filtering: Customizes options based on user preferences.
- Integration with Official Databases : Ensures reliability and accuracy.
- Mobile and Web Access : Enhances accessibility across devices.
- Multilingual Support : Provides information in Arabic and English.

6.3 Flow Chart Diagram:

Overall Flow

The flowchart depicts the steps a student takes when using an app. It starts with the user launching the app and then branches based on whether the student has an account or not.

Step-by-Step Breakdown

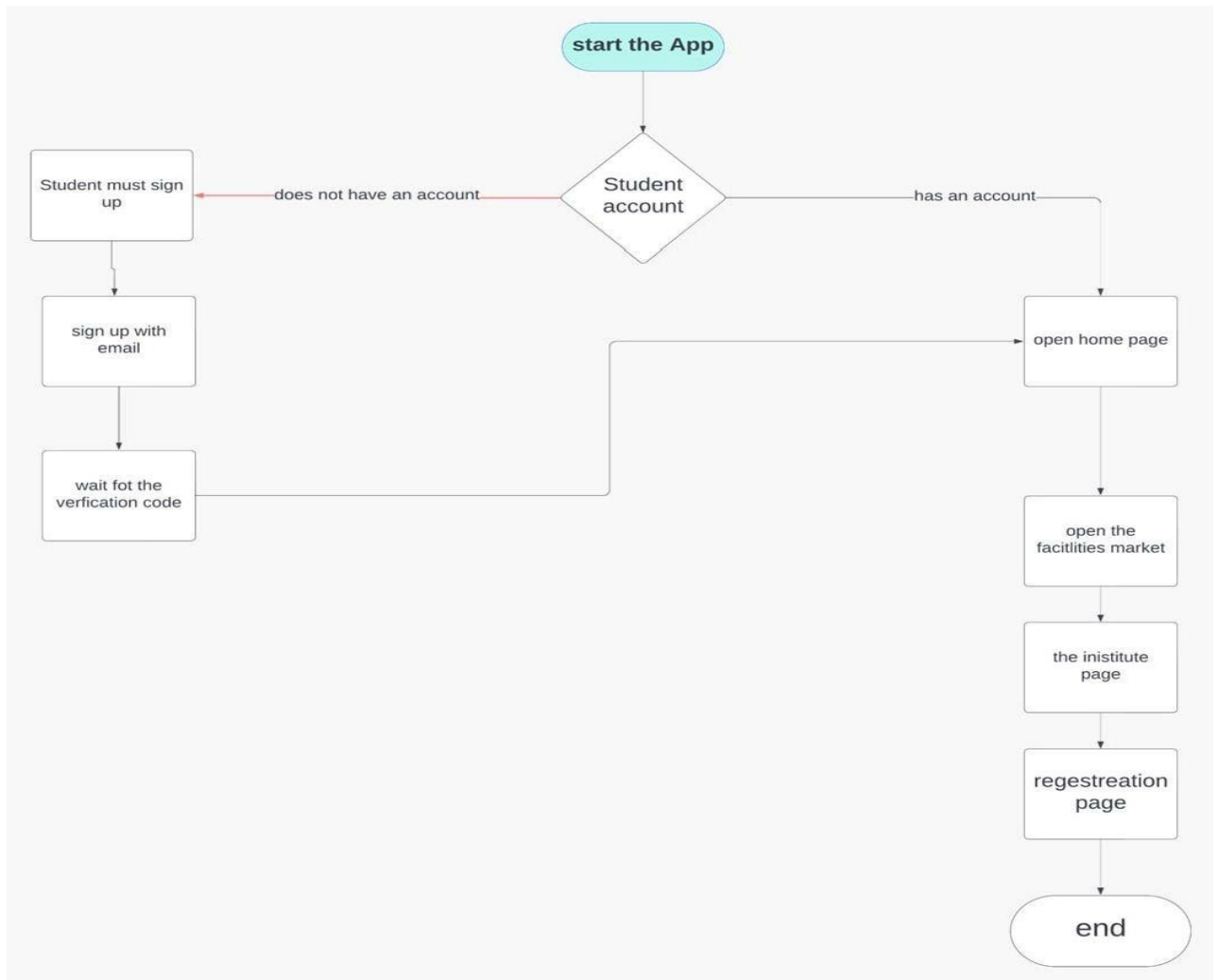
1. Start the App: The user initiates the app.
2. Student Account:
 - Yes (Has an Account): The user is directly taken to the home page.
 - No (Does Not Have an Account): The flow continues to the sign-up process.
3. Sign Up with Email: The user provides their email address to create a new account.
4. Wait for Verification Code: The user waits for a verification code to be sent to their email.
5. Open Home Page: Once the account is verified, the user is redirected to the home page.
6. Open the Facilities Market: The user can access the facilities market from the home page.
7. The Institute Page: The user can also navigate to the institute page.
8. Registration Page: The user can access the registration page.
9. End: The flowchart concludes.

Key Points

- The flowchart is designed to guide a new user through the initial steps of the app.
- It clearly distinguishes between users with and without existing accounts.
- The verification code step ensures account security.
- The flowchart provides a clear overview of the app's main functionalities.

Let me know if you would like to explore any specific part of the flowchart in more detail!

as fg(6.2)



fg(6.2)

6.4 ERD Diagram :

****Entities****

*** **user:**** Represents users with attributes like ID, name, email, and phone number.

*** **employee:**** Represents employees with attributes like ID, name, salary, manager ID, and city.

*****app:**** Represents applications with attributes like ID, name, cost, and time.

*****ad comp:**** Represents ad components with attributes like ID, name, cost, and time.

*****collage:**** Represents collages with attributes like ID, name, cost, and degree.

****Relationships****

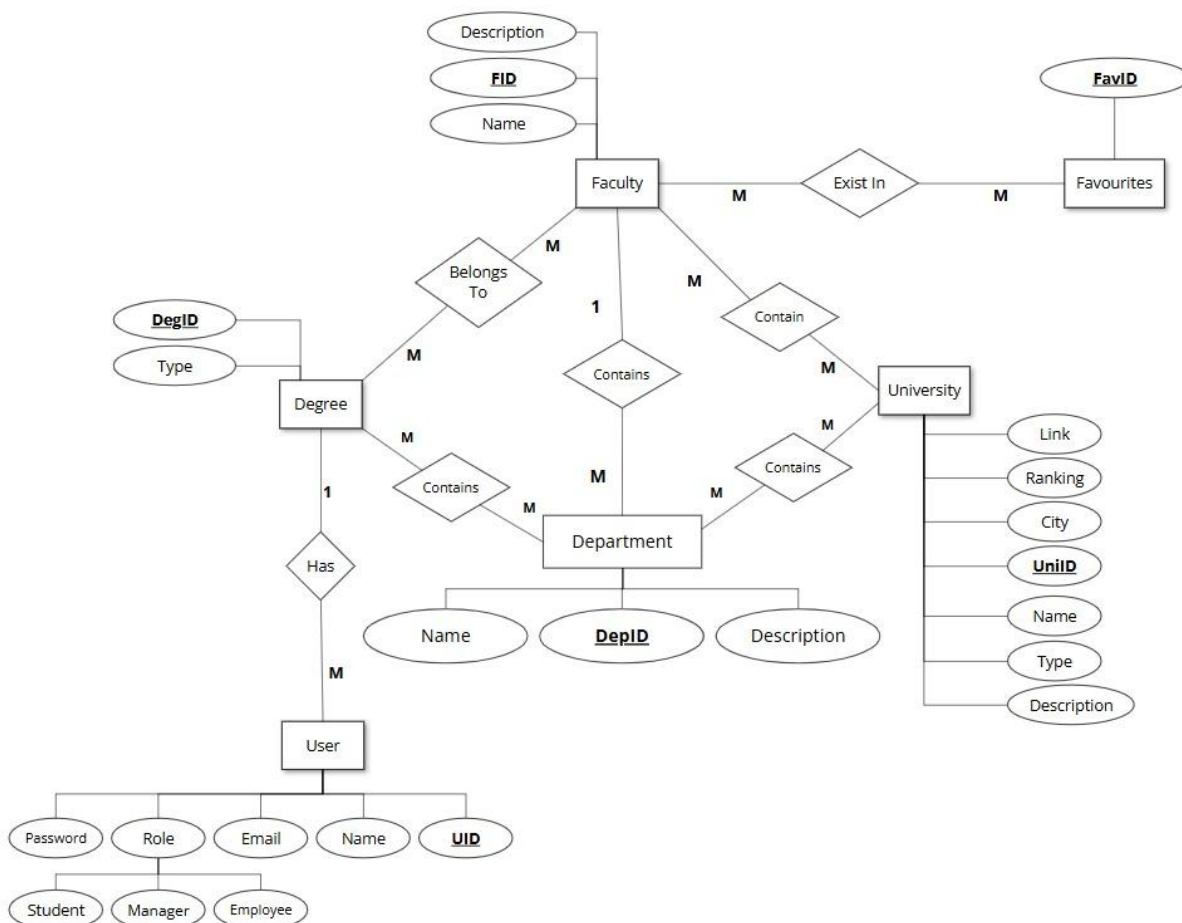
*****user - app (1:M):**** One user can have many applications.

*****employee - app (1:M):**** One employee can have many applications.

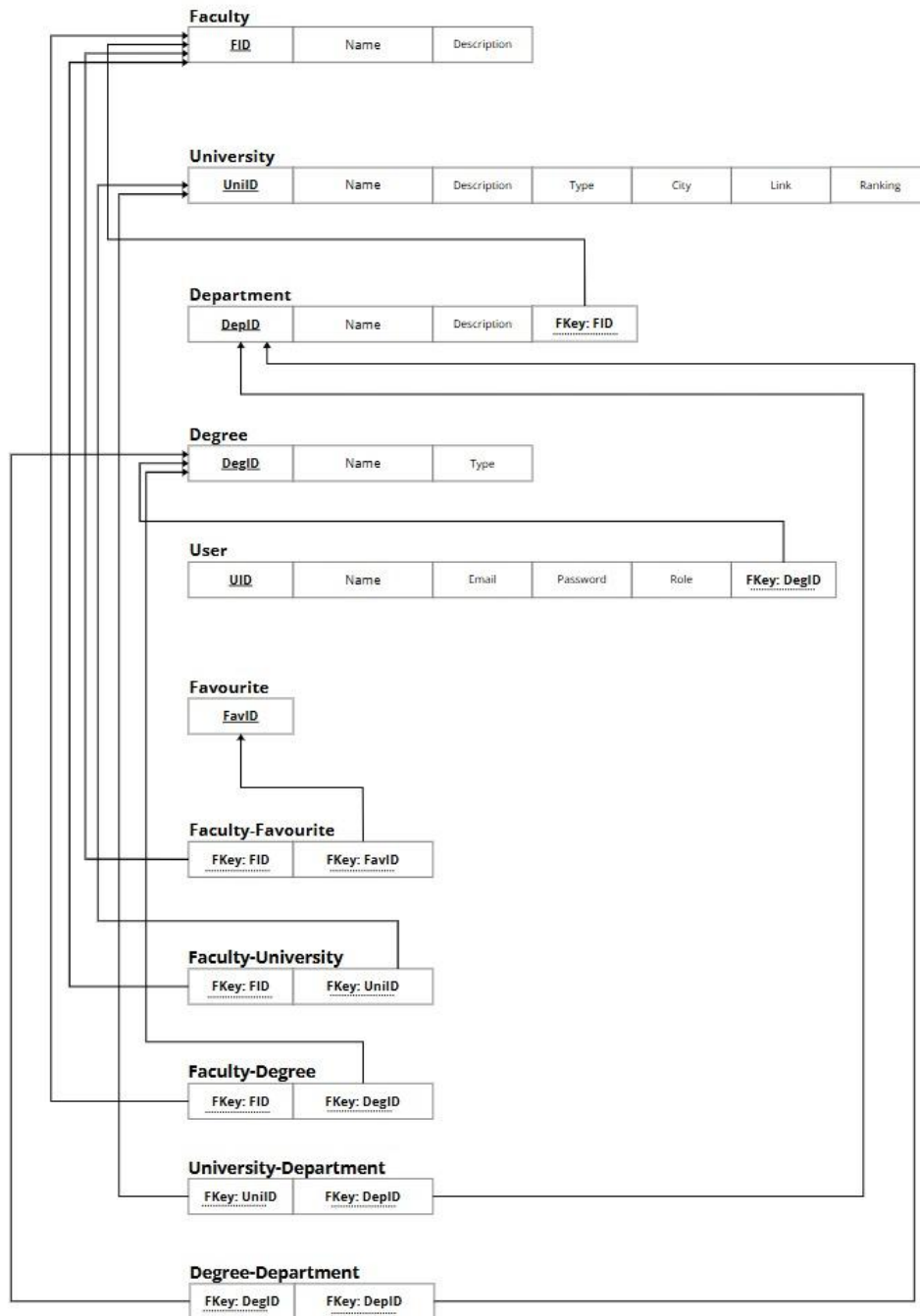
*****app - ad comp (1:M):**** One application can have many ad components.

*****app - collage (1:M):**** One application can have many collages.

as fg(6.3)



Mapping/ Schema



fg(6.3)

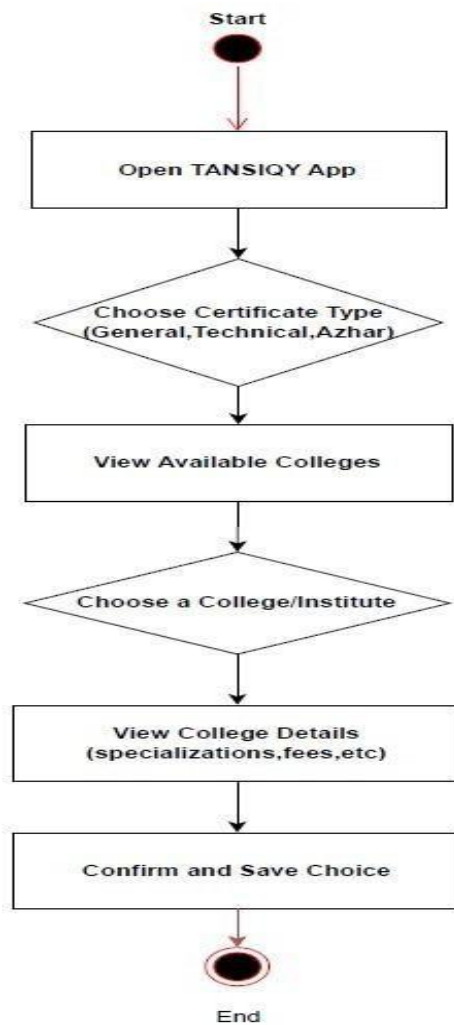
6.5 Activity Diagram :

Overall Flow

The diagram depicts the steps a student takes when using the TANSIQY app to choose a college or institute for a specific certificate type.

Step-by-Step Breakdown

1. Start: The user launches the TANSIQY app.
2. Open TANSIQY App: The app opens.
3. Choose Certificate Type: The user selects the type of certificate they are interested in (General, Technical, Azhar).
4. View Available Colleges: The app displays a list of colleges or institutes offering the selected certificate type.
5. Choose a College/Institute: The user selects the desired college or institute from the list.
6. View College Details: The app displays details about the selected college/institute, including specializations, fees, etc.
7. Confirm and Save Choice: The user confirms their choice and saves it.
8. End: The process concludes. as fg(6.4)



fg(6.4)

6.6 context Diagram :

Overall Flow

The diagram depicts the interactions and relationships between different entities involved in a system, likely a college selection or education management system.

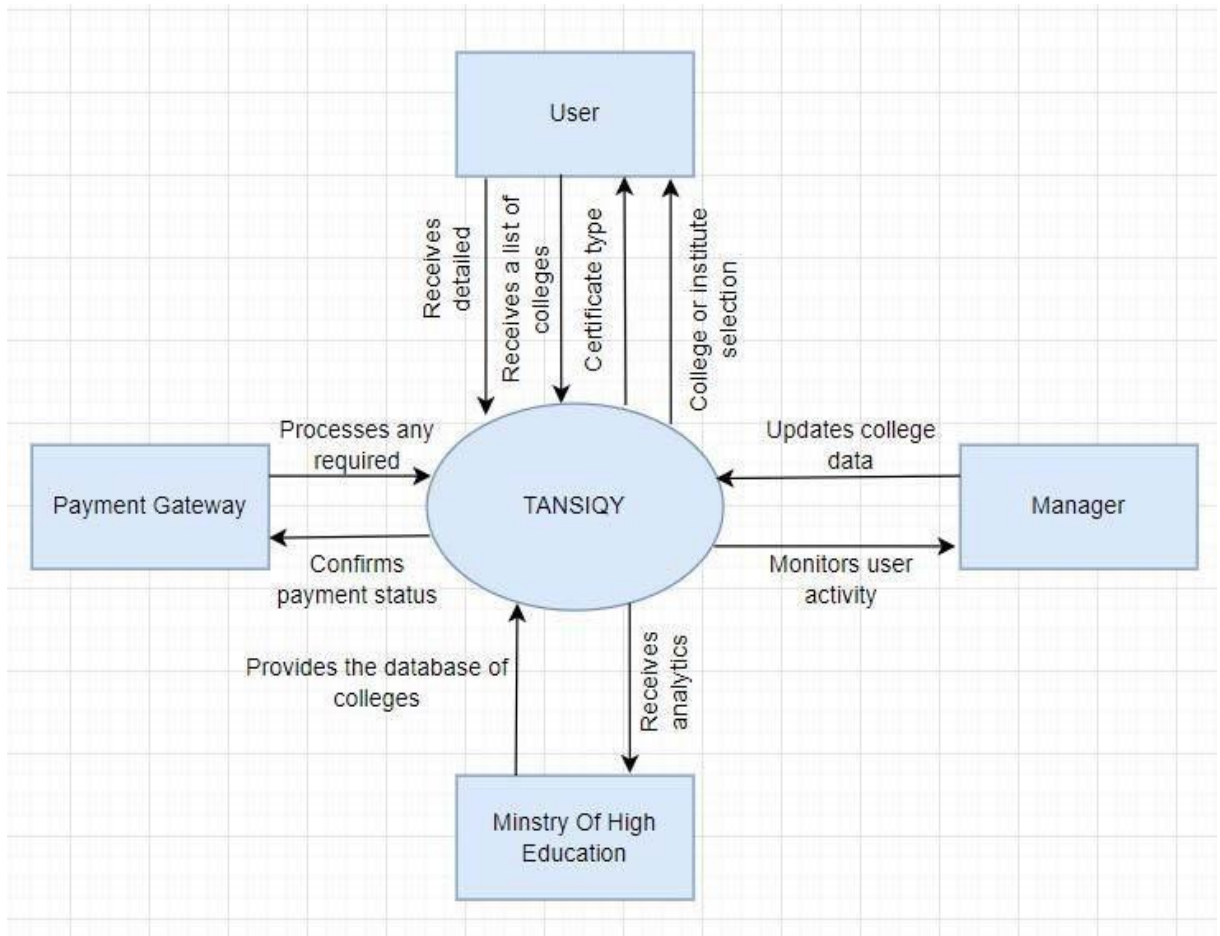
Entities

- User: Represents the user who interacts with the system.
- TANSIQY: The central system or application that facilitates the interactions and processes.
- Payment Gateway: Handles payment transactions within the system.
- Manager: Manages the system and its data.

- Ministry of High Education: Provides the database of colleges and other relevant information.

Interactions

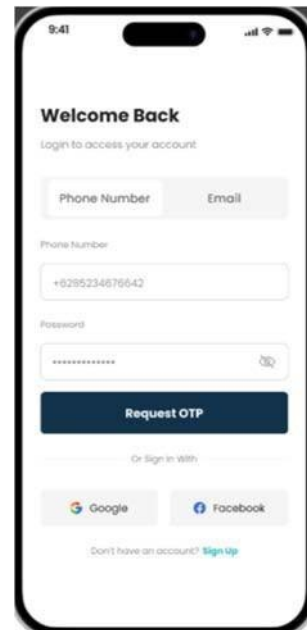
- User:
 - Receives a list of colleges based on their selected certificate type.
 - Receives college or institute selection options.
 - Interacts with the system to make choices and initiate actions.
- TANSIQY:
 - Receives certificate type from the user.
 - Processes any required data.
 - Confirms payment status with the Payment Gateway.
 - Updates college data based on user interactions.
 - Monitors user activity.
 - Receives analytics from the Ministry of High Education.
- Payment Gateway:
 - Confirms payment status to TANSIQY.
 - Provides the database of colleges to TANSIQY.
- Manager:
 - Updates college data.
 - Monitors user activity.
- Ministry of High Education:
 - Provides the database of colleges to TANSIQY.
 - Receives analytics from TANSIQY.as fg(6.5)



fg(6.5)

6.7 User Interface and Design :

- **Simplicity** : A clear, minimalistic design avoids clutter.
- **Responsiveness** : Ensures compatibility with various devices.
- **Accessibility** : Features include voice guidance and high-contrast modes for users with disabilities.



Chapter 7 :

Societal Impact

7.1 Bridging Educational Gaps :

TANSIQY reshapes the educational landscape by providing equal opportunities to students in remote areas, fostering nationwide equity.

7.2 Encouraging Workforce Alignment :

By aligning students with market needs, **TANSIQY** addresses unemployment and skill gaps. The platform's guidance empowers students to choose paths leading to sustainable careers.

7.3 Cost :

- 400\$ server to make app link with world network not just local or personal.
- 600\$ for programming parts(fluter-ui\ux-desing-backend- data base- frontend).
- 500\$ for markting on (facebook- tiktok - instgram.... etc).
- 100\$ non technical parts like(lawer- people who get data -some paper work).

7.4 Benfits :

- from our calculation we expect our app will be very success
- we depend on two type of advertisements 'ad'
- first is from normal ad from google play or ios they will give us from 2 to 10 \$for every 1000 watch to one ad for one time and our app target more than 1 M Student only per year so it will be very successful app
- second is from university specifically privet university will put an option for uni to put thire ad for thire uni on our app and our web in the beginning we target atleast 100\$ for ad put it will be more higher after that

Chapter 8 :

Future Enhancements

8.1 International Expansion :

Incorporating global universities and programs will help students explore opportunities beyond Egypt and prepare for global competition.

8.2 Career Guidance :

New features like :

- Aptitude Tests.
- Resume Building.
- Career Counseling.

These will extend the platform's impact beyond academic selection.

8.3 AI Integration :

Advanced algorithms will enhance :

- Personalization.
- Smarter recommendations based on user data.

8.4 Break Even Point :

The graph illustrates the relationship between costs and benefits over time. The point where the cost line intersects with the benefit line represents the break-even point. This signifies the point in time when the total costs equal the total benefits, indicating a neutral financial position.

Key Elements

- **Cost:** The blue line represents the total cost incurred over time.
- **Benefits:** The gray line represents the total benefits accrued over time.
- **Break-Even Point:** The point where the cost and benefit lines intersect.

Interpretation

Before the break-even point, the cost line is higher than the benefit line, indicating that the total costs exceed the total benefits. This represents a period of net loss.

After the break-even point, the benefit line surpasses the cost line, signifying that the total benefits exceed the total costs. This represents a period of net profit.

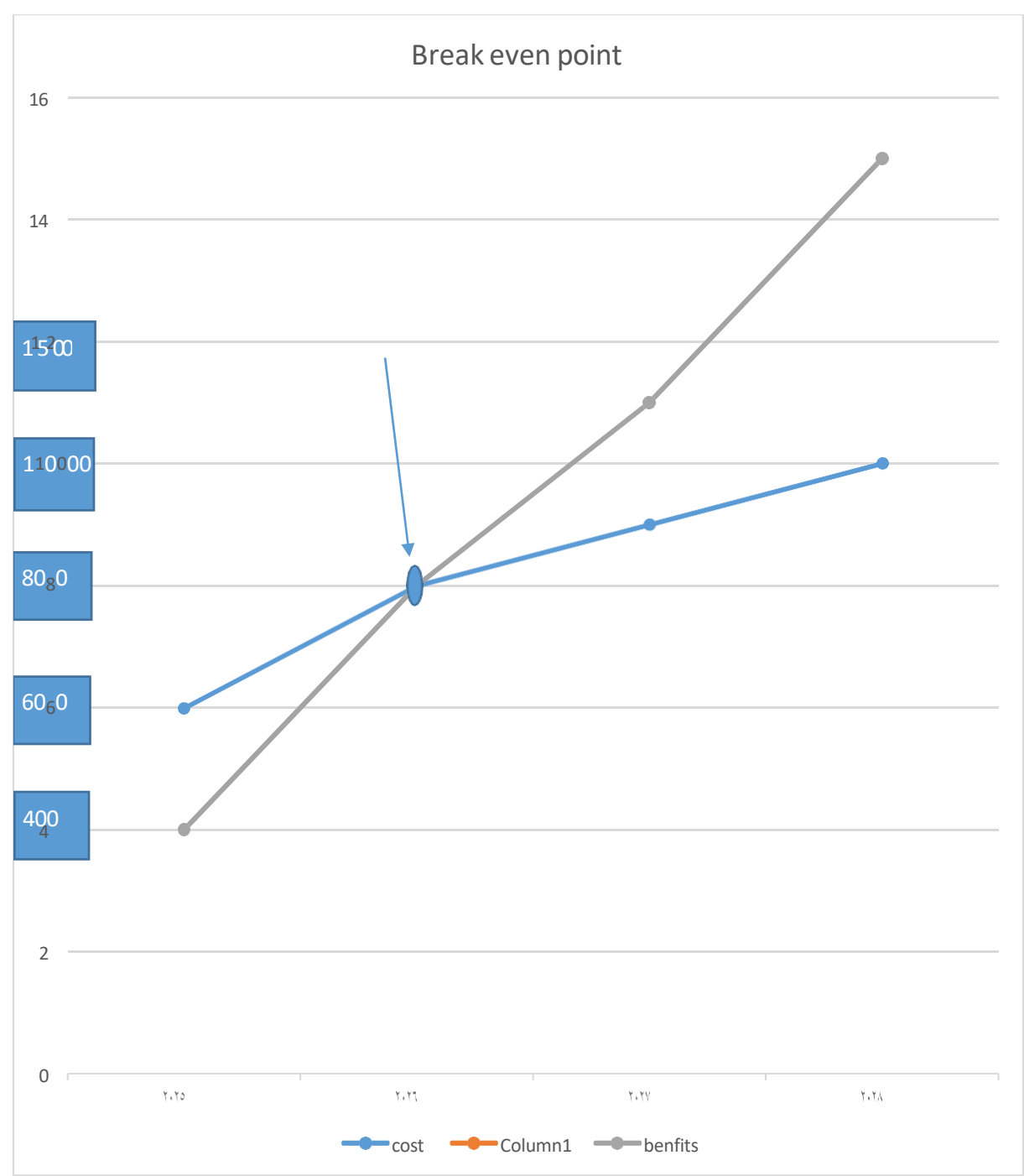
Additional Insights

- The slope of the cost and benefit lines can provide insights into the rate of change in costs and benefits over time.
- The distance between the cost and benefit lines before and after the break-even point indicates the magnitude of net loss or net profit.
- The position of the break-even point on the time axis can reveal the duration of the initial loss period.

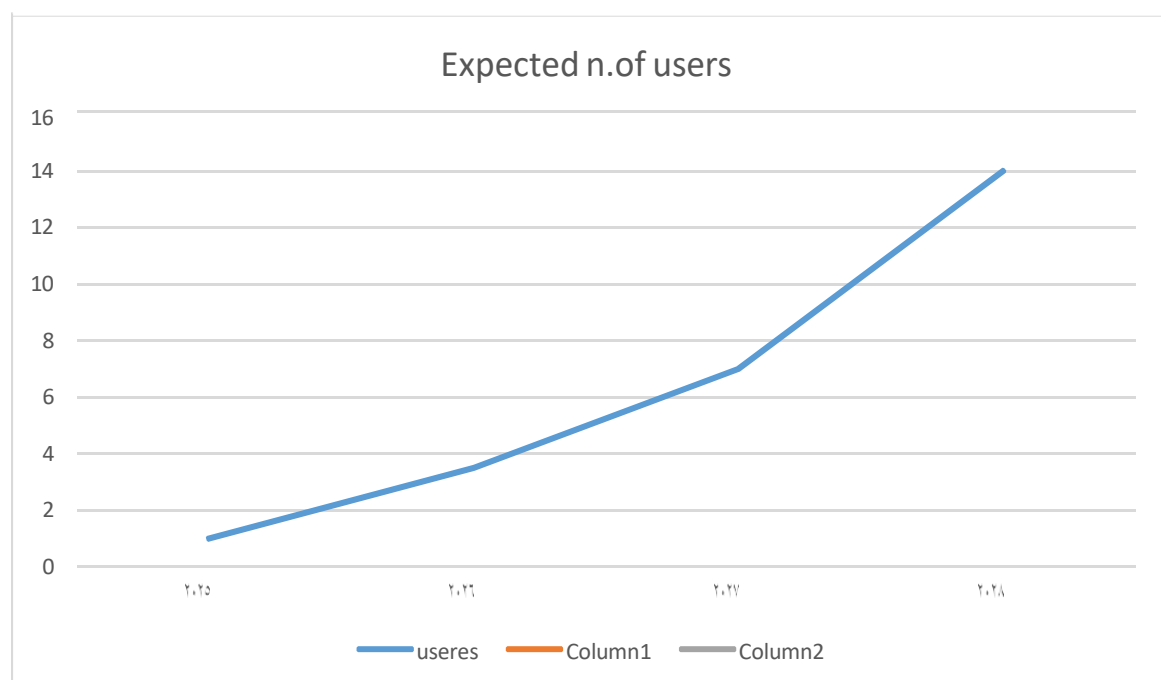
Limitations

- The graph does not provide specific values for costs and benefits, making it difficult to quantify the exact financial impact.
- The interpretation of the graph's meaning depends on the context of the specific situation being analyzed.

as fg(8.1)&fg(8.2)



fg(8.1)



fg(8.2)

Chapter 9 :

Conclusion and Recommendations

9.1 Key Benefits :

- Accessibility : Centralized access to educational information.
- Efficiency : Simplified decision-making saves time and effort.
- Reliability : Verified data ensures trust and accuracy.

9.2 Future Prospects :

- Expanding to include international educational opportunities.
- Adding career guidance features to support students post-graduation.

Partnering with employers for job and internship integration.

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APPENDICES

Appendix A: Application Screenshots

Incorporate screen provide a visual guide for users. Ensure each screenshot is clear and accompanied by a brief description. For example:

- **Home Screen:** Displays the main interface upon launching the application.
- **User Profile:** Shows user information and settings.
- **Settings Page:** Allows customization of application preferences.

Appendix B: Code Snippets

Include key code snippets to illustrate important functionalities. Ensure each snippet is well-documented with comments. For instance:

- **User Authentication Function:** Handles login and registration processes.

```
python def authenticate_user(username, password): # Check if the user exists if user_exists(username): # Verify password if verify_password(username, password): return "Authentication successful" else: return "Incorrect password" else: return "User does not exist"
```
- **Data Retrieval from API:** Fetches data from an external source.

```
javascript fetch('https://api.example.com/data') .then(response => response.json()) .then(data => { // Process the retrieved data console.log(data); }) .catch(error => { // Handle any errors console.error('Error fetching data:', error); });
```

Appendix C: External Resources

List any external libraries, APIs, or tools utilized in the project, along with their versions and official documentation links. For example:

- **React:** A JavaScript library for building user interfaces.
 - Version: 17.0.2
 - Documentation: <https://reactjs.org/docs/getting-started.html>
- **Express.js:** A web application framework for Node.js.
 - Version: 4.17.1
 - Documentation: <https://expressjs.com/en/starter/installing.html>

Appendix D: Glossary

Define technical terms and acronyms used in the documentation to aid reader comprehension. For instance:

- **API:** Application Programming Interface; a set of functions allowing applications to access data and interact with external software components.

- **CRUD:** Create, Read, Update, Delete; the four basic operations of persistent storage.

□Including these appendices will provide readers with comprehensive insights into your application, enhancing their understanding and usability of the documentation.