INDEX

1. Introduction:

1.1 Project Overview:

Guidance is a term sometimes used broadly to refer to advising or helping and individuals with any kind educational problem. It can be referred to as service provided by the Guidance App to help young person in making clever decision. Career guidance consist of services that help people successfully manage their career development, which includes the development of competitive exams like GATE, GRE, TOEFL, MPSC, UPSC, and placement into a chosen vocation, and follows up the placement to ensure effectiveness. In career guidance, counseling is used as one of the interventional strategies.

This Career Guidance App aims to be a helpful and useful starting point for this confusing phase. There is a wealth of tools and data available for students but they do not have the time to research as well as finalize the decision. This system will bring all these tools and data in one place for students that is TKIET Career Development Cell App

1.2 Motivation

- Manual process of TKIET career development cell is very time consuming.
- There is no such application in our Institute.
- So, we are going to develop TKIET career development app.

1.3 Problem Statement:

There is no Career Development App in TKIET. Students are not aware about career after graduation and not having information about all options after graduation. So we are going to develop an application which provides a better career choice for undergraduate engineering students according to their interest.

1.4 Objectives

- TKIET Career development app is for undergraduate engineering students for their better career choice.
- To save the time taken by manual process.

2. Literature Review

2.1 Existing System Study

- There is no Career Development App in TKIET for career guidance of students.

- Students generally have to go through hundreds of sites to choose their best career path.
- In absence of adult guidance, they often find it difficult to find relevant information about the career they want.
- Generally, students make poorly researched decisions which they then have to struggle with

Drawbacks Of Existing System

- Increase human workload.
- Low security.
- Difficult to handle.
- Difficult to update data.
- Record keeping is difficult.
- May be chance of losing data.

2.2 Proposed System Study

Student have to register themselves then they can login into career development application. Next step is student have to enter career interest and according to interest following options are available:
Career statistics, activities, exam information, Mock tests, Career team information, QA section.

We are going to provide department wise login credentials. By using that credentials admin can login into application. Admin can edit, delete and add career data into applications as well as can block unauthorized user or user who misuse the content.

Faculty have to register themselves and they can login.
We are going to provide only view facility for career modules (read rights) and read/write rights to QA.

Career team consist of department wise faculty coordinator. We are going to provide contact details of career team members. Student can contact to career team for more information.

2.3 Feasibility Study

1)Technical Feasibility

- Language: Java 8
- RDBMS: MySQL 8.0.27
- IDE: Android Studio 2020.3.1.25
- Diagramming Tools: Microsoft Visio 16.0 (Licensed)

2)Legal Feasibility

- The project “TKIET Career development app” is a complete Application
- Project “TKIET Career development app” is absolutely legal and doable
- It meets all legal and ethical requirements as per the Information Technology Act,2000 Govt. of India
- Project “TKIET Career development app” uses freely available software development tools
- No threats to institute’s confidential data
- From above, it is clear that project “TKIET Career development app” is legally feasible with no potential infringement

3. Project scope and Requirement Analysis

Project scope is the part of project planning that involves determining and documenting a list of specific project goals, deliverables, tasks, costs and deadlines. The documentation of a project's scope, which is called a scope statement, terms of reference or statement of work, explains the boundaries of the project, establishes responsibilities for each team member and sets up procedures for how completed work will be verified and approved. During the project, this documentation helps the project team remain focused and on task. The scope statement also provides the project team with guidelines for making decisions about change requests during the project.

3.1 Project Scope

In-Scope: 1. Useful for TKIET Student

2. Graphical representation of record

3. Exam details

Out-Scope: 1. Not used for other institutes

2. Only for engineering students

3.2 Requirement Gathering and Analysis

Requirements' gathering are one of the most essential parts of any project and adds value to a project on multiple levels. When it comes to smaller budgets, tighter timelines and limited scopes, exact documentation of all the project requirements become crucial.

3.2.1 Functional Requirements: -

A functional requirement, in software and systems engineering, is a declaration of the intended function of a system and its components. Based on functional requirements, an engineer determines the behavior (output) that a device or software is expected to exhibit in the case of a certain input.

A system design is an early form of a functional requirement. Functional requirements of a system can relate to hardware, software or both in terms of calculations, technical details, data manipulation and processing or other specific functionality that defines what a system is supposed to accomplish. A functional requirement can be in the form of a document explaining the expected types of outputs when the device (system) is placed in a certain kind of environment.

A functional requirement is said to be a later form of a system design because a design is the outcome of overcoming a certain kind of a problem (technical/non-technical) being faced.

Following are the functional requirements of proposed system:

- Analyze the information of student interest provided by the students.
- Accessible for students, admin, faculty and career team.
- Display the detail information of career path.
- Conduction of mock test.
- Doubt clarification through QA section.

3.2.2 Non - Functional Requirements: -

A non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors.

- Usability: - The system should be easy to use and simple to understand. More than one type of user can use the system at a time, specifically an applicant and the recruitment unit can use the system at the same time. The system shall protect users not to make any errors during filling application forms and making decisions.
- Scalability: - The system should be scalable to handle increasing or decreasing workloads.

- Maintainability: - The maintenance should be able to fix any problem occur suddenly.
- Accuracy: - Accuracy is part of the sense of reliability, the system checks and reports must be mathematically correct, including ranking candidates.
- Efficiency: - The job announcement must be updated in real time.
- Safety: - There will be a backup of data for any future mishap

3.3 Software Requirement Specification (SRS)

Software Requirement:

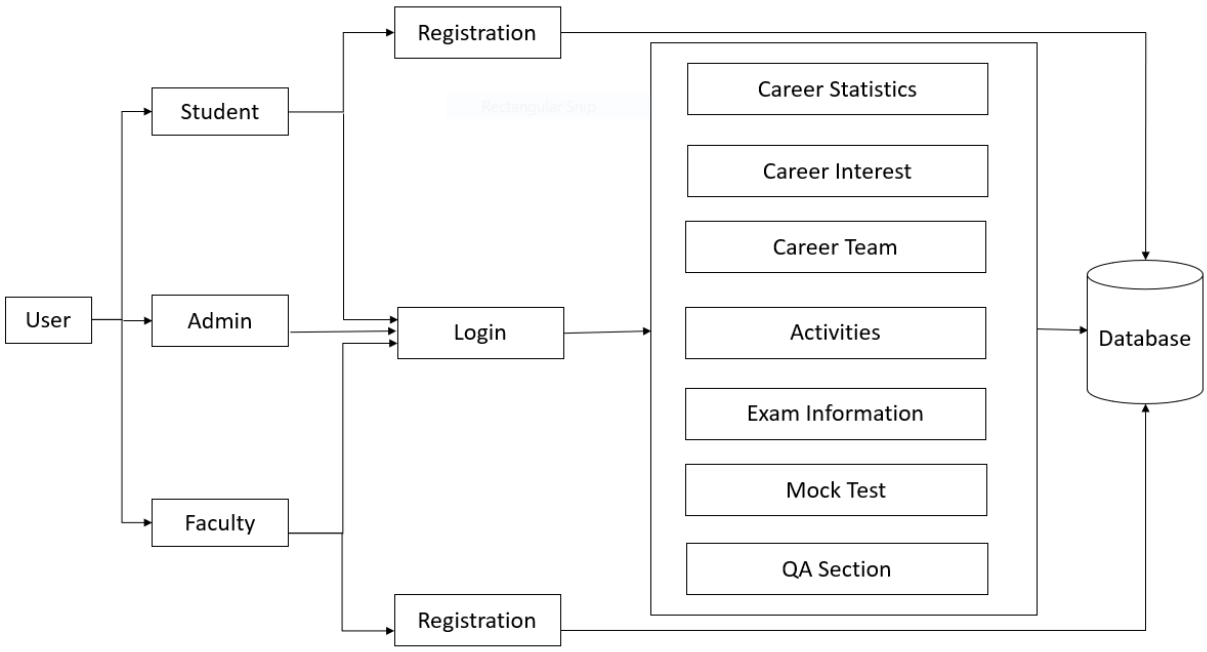
- Operating System: Windows 10 or higher
- Programming Language: Java, XML.
- Technology: Android.
- IDE: Android Studio (Version-3.1.25).
- Database: My SQL Server (Version-8.0.27)

Hardware Requirements:

- Processor: Intel core I3 (2.0 GHz).
- RAM: 5 GB or more.
- Hard Disk: 5 GB or more.

4. System Analysis and Design

4.1 System Architecture



4.2 System Modules

1)Student Module:

Student have to register themselves then they can login into career development application.

Next step is student have to enter career interest and according to interest following options are available:

-Career statistics
-Activities
-Exam information
-Mock tests
-Career team information
-QA section

2)Admin Module:

We are going to provide department wise login credentials. By using that credentials admin can login into application. Admin can edit, delete and add career data into applications as well as can block unauthorized user or user who misuse the content.

3)Faculty:

Faculty have to register themselves and they can login.
We are going to provide only view facility for career modules (read rights) and read/write rights to QA.

4)Career team:

Career team consist of department wise faculty coordinator. We are going to provide contact details of career team members. Student can contact to career team for more information.

4.3 System Modeling and Design

4.3.1 Data Flow Diagram

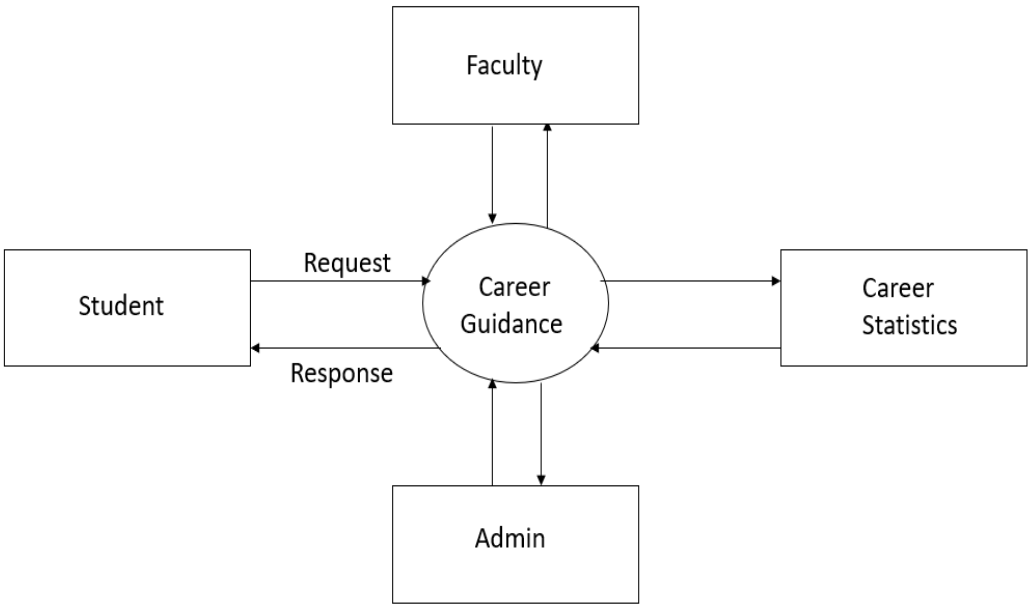
In Software engineering DFD (data flow diagram) can be drawn to represent the system of different levels of abstraction. Higher level DFDs are partitioned into low levels-hacking more information and functional elements. Levels in DFD are numbered 0, 1, 2 or beyond. Here, we will see mainly 3 levels in data flow diagram, which are: 0-level DFD, 1-level DFD, and 2-level DFD.

DFD Layers

Draw data flow diagrams can be made in several nested layers. A single process node on a high-level diagram can be expanded to show a more detailed data flow diagram. Draw the context diagram first, followed by various layers of data flow diagrams.

1 DFD Level 0

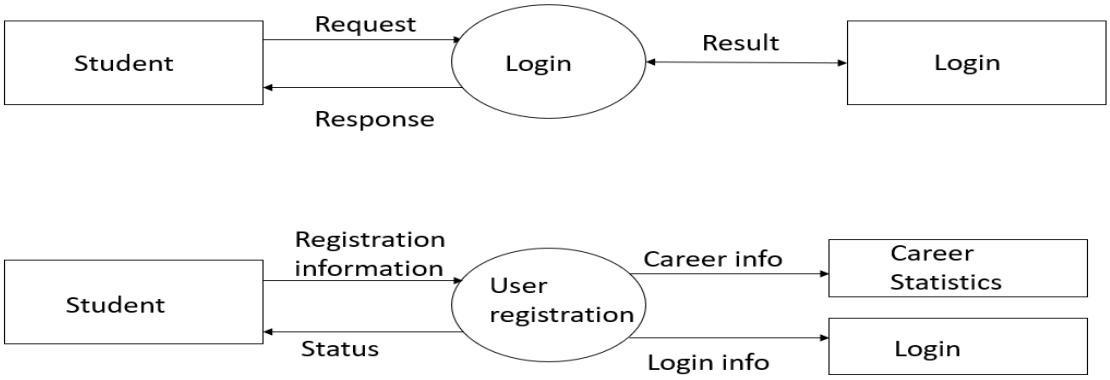
It is also known as context diagram. It’s designed to be an abstraction view, showing the system as a single process with its relationship to external entities. It represents the entire system as single bubble with input and output data indicated by incoming/outgoing arrows.



2 DFD Level 1

The Level 0 DFD is broken down into more specific, Level 1 DFD. Level 1 DFD depicts basic modules in the system and flow of data among various modules. Level 1 DFD also mentions basic processes and sources of information. In 1-level DFD, context diagram is decomposed into multiple bubbles/processes.in this level we highlight the main functions of the system and breakdown the high-level process of 0-level DFD into sub processes.

- It provides a more detailed view of the Context Level Diagram.
- Here, the main functions carried out by the system are highlighted as we break into its sub-processes.



5. Project Plan and Schedule

5.1 Project planning and Project Resources

WEEKS	PHASES	TASKS
01/08/20 to 13/08/20	Requirement Gathering & analysis	Internet Searching and Requirement Gathering and Analysis
16/08/20 to 20/08/20		Synopsis Submission and Synopsis Presentation.
23/08/20 to 21/09/20	Planning	Planning for Project Risk Analysis
26/09/20 to 29/10/20	Designing	Designing Structure of Project
01/11/20 to 26/03/21	Implementation	Coding of Project
27/11/019 to 29/03/020	Testing	Integration and Testing of Project
01/04/21 to 15/06/21	Deployment	Deployment of Project

6. Risk Management and Analysis

6.1 Risk Identification

The Risk Analysis means risk containment and mitigation. First, we have identified the risks and then planned. Then ready to act when a risk arises, drawing upon the experience and knowledge of the entire team to minimize the impact of risk on project. Most software engineering project are inherently risky because of the variety potential Problems that might arise. The software project risk may be due to new and proven. Technologies, user and functional requirements, complex application and system architecture, performance and organizational issues.

Types of risk

- Scope risk
- Scheduling risk
- Resource issues
- Technology risks

6.2 Risk Analysis

- Identification of risk

  Here, mostly the identification of source or root of the risk is done.

- Classification of risk

  There are various types of risk that user risk, software risk, hardware risk, network risk according to it risk has been get classify.

- Plan for minimizing the risk

  What should the methodology that the user has to follow for planning the risk minimization.

- Implement mitigation action

  Kind of proper work or action that should have to perform in terms of controlling the risk.

- Communicate risk status throughout the project

  The risk status at each and every stage of the project is get monitored and Communicated to the project concerns people.

7. References

Research Paper

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Project Guide
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