Applied Project(3001)

National School of Business Management





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Executive Summary

This is the design document for the GrowApp. It describes the system design of the app.

This thoroughly goes over the subsystems that make up the systems and the interactions between them.

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Overview

"Grow App" is an app for growing and finding talent. This document is the design document for this application. This will further expand on the requirements layed out in the Requirement Analysis document.

There are three main subsystems at play here.

- 1. User Management Subsystem This is a subsystem that manages the data and the profiles of the those who use the application
- 2. Resource Management Subsystem This is the subsystem that manages the different things that can be used in learning.
- 3. Talent Management Subsystem This manages the different specifications and tests for different "Occupations"

These Subsystems are connected to a database. The database provides ability to store data for later use and it allows content to be created dynamically.

These Subsystems and database work together inorder to provide the fulfill the requirements.

System Architecture

The structure of the app is provided in the figures below (?? - ??. It reflects the different subsystems found, its databases and includes how they interact with one another.

2.1 User Management Subsystem (UMS)

The User Management Subsystem manages the details of the users who use the app. This starts up in the beginning of the app. If the user is not registers it prompts the user to register. If already register he can login using his username and password.

The User can make a profile which describes him .The User can take test inorder to certify their capabilities. Their capabilities will be stored in their profile .

Employers contact the prospective employee using the UMS.

2.2 Resource Management Subsystem (RMS)

Resource Management System is the subsystem that houses the different clases related to eductional content.

When ever a person searches for and occupation of somekind, The RMS helps in fetching the relevant sources. The RMS is also in charge of the rating system for the educational content.

Users can add their own resources using the RMS.

2.3 Talent Management Subsystem (TMS)

The "Occupation" is an job opportunity or a standalone skill.

The Talent Management System will test the abilities of the user .This will determine whether the said user has the necessary abilities to be certified of having the mastery over the Occupation. If the person has passed the Occupation will be added as a capbility.

Employers use the TMS inorder to scount for skilled people for them to hire.

A persons rankings is also determined using the TMS.

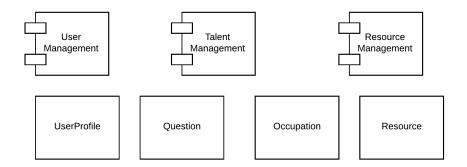


Figure 2.1: Subsystem and database tables

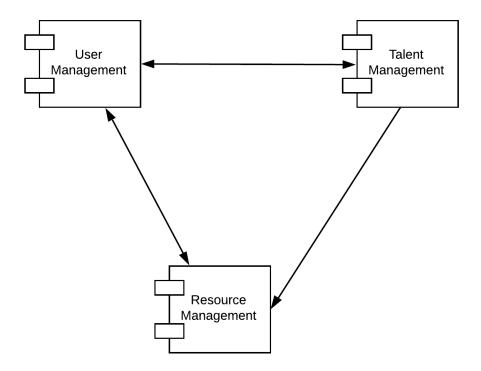


Figure 2.2: Linkages between subsystems

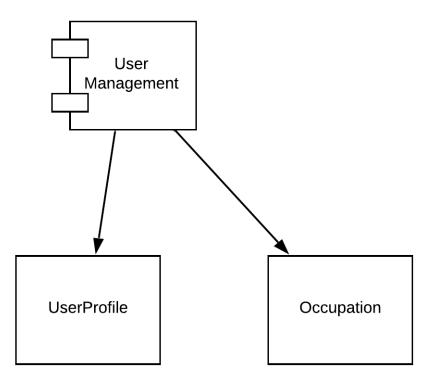


Figure 2.3: UserManagement subsystem

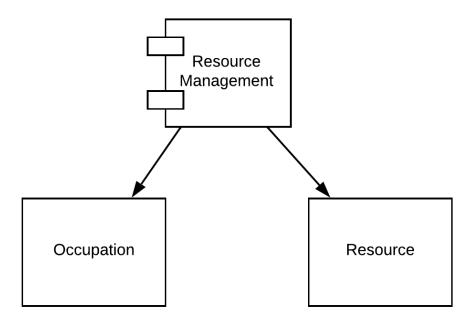


Figure 2.4: Resource Management Subsystem

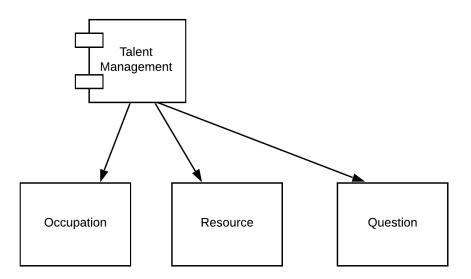


Figure 2.5: Talent Management Subsystem

Database Design

Figure ?? shows the Entity Relationship diagram for the database. It has 4 main entities. The UserProfile, Resource, Question and the Occupation.

We plan on using a NOSQL database called mongoDB inorder to store the data. Accordingly a strict schema is not necessary. But data will be organized based on the ER Diagram above.

3.1 UserProfile Table

This will store the user information.

3.2 Resource Table

This will details about the various educational content. It will show what occupations it will support.

3.3 Question Table

This will be the different questions that will be used in testing the persons skills for a particular Occupation/Capability

3.4 Occupation Table

This will be storing the different details of the occupations, what is required to complete them and so on.

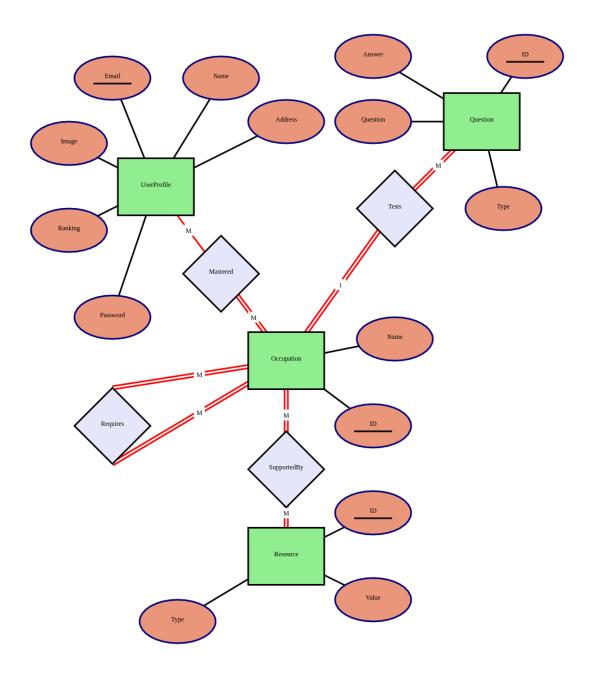
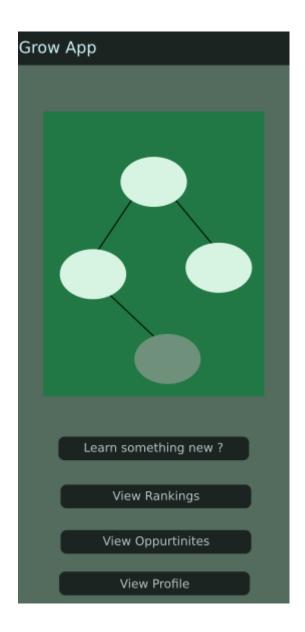


Figure 3.1: ER Diagram

Detailed Design

4.1 Basic Interface

When the user enters the app he will initially be prompted with a login screen (which will be discussed later). After signing in the basic interface will be as follows. The diagram shows an area for a person for new things to master. In the middle is the tree. It has the current capility tree the person has.



4.2 User Managment Subsystem

This Initally begins when the user first opens the app. He is greated with a login. If not registered, the user can register with the app using the register page. If the user is already registered, then that person can login using their creditials.

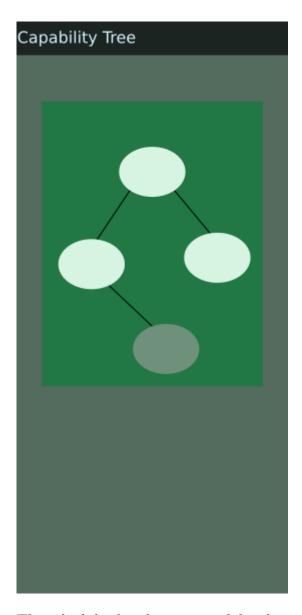




 \bullet The user can look at their rankings .



• The user can also see what capabilities they have.



• The schedule they have created for themselves.

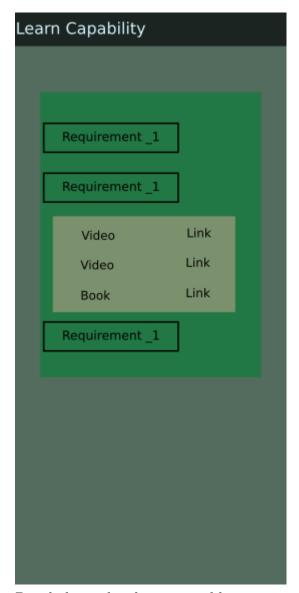


• They can change their profile settings as well.



4.3 Resource Management Subsytem

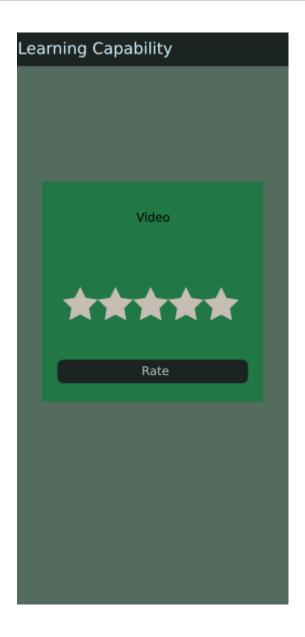
The User can search for new "Occupations" they need to master. Based on the skills they already have the resources for learning are provided.



People have the chance to add new resources



People can rate the resources as well



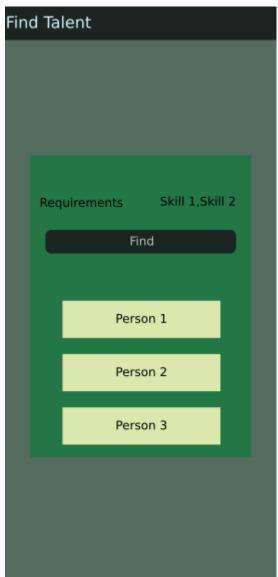
4.4 Talent Managment Subsystem

The User can car certify their capabilities . This is where they take a test for a specified amount of time. Their results will affect their rankings.



Employers can search for people using

this system. They can provide the requirements and find people.



They can contact people using the site.



Users can view their opportunities . The user can see offers made by employers.

