Online Career Advising System for Undergraduate Students

Chapter-1

INTRODUCTION

1.1 Introduction

According to our education system, online career advising system is an essential thing for our undergraduate students. If we provide manual career advising system with human counselors in charge, we can face following problems: few number of human counselors, unavailability of a counselor in a good number of universities, few number of counselors attending to students during university hours and the office of a counselor in universities are so unpopular that students hardly meet them for career counseling. But if the system is online based, then this type of complexities can be avoided and the system will be more efficient and user friendly. Most of the career advising systems that are available are built for graduate students, fresher students and employees. But the problems of undergraduate students and graduates or employees are not same. So they need separate career advising system. This proposed online based career advising system has been developed in accordance with requirements of undergraduate students. At first students need to register themselves in this system. After performing some processes, they will become the registered members. Then they will be able to enjoy all the services. During registration, users need to put their email address and password and they have to remember these information for their login procedure. After logging in, user will participate in an interview session and through this interview, counselor will ask several questions on different subjects. Based on user’s performance, counselor will provide the best solutions to their problems.

1.2 Background study:

Having an efficient online career advising system also makes it easier to decide the student’s interest, it helps the users to understand their strengths and weaknesses also. So, the users can have a very clear idea about their capabilities and can design their career properly. Another thing is, when we choose our career, most of the times we become emotional and select a profession which is not perfect for us. Here counselor will analyze all data of users, then the decision will be provided and you can say that it will be properly analyzed decision, not an emotional decision.

1.3 Objectives:

* To analyze students' interests, strengths and aspirations and achievements.
* To help you to consider your career options and to make informed suitable and achievable career decisions through an online process.
* To provide information, advice and guidance to people who are looking for education, training or employment opportunities.
* To determine each student's uniqueness based on a question-answer session.

1.4 Methodology

The development process on “Online Career Advising System for Undergraduate Students

” will complete following the structure described later on Software Analysis & Design. This study on “Online Career Advising System for Undergraduate Students” through Incremental Process Model is tentative in nature. The variables identified to manipulate through a handy inspection and from primary and secondary data. Here the product is designed, implemented and tested incrementally until the product is finished. It involves both development and maintenance. The product is defined as finished when it satisfies all of its requirements. This model can satisfy the client’s requirements properly. That’s why it is selected.

1.4.1 Data sources:

For this project in data collection phase we collected two types of data: Primary Data, Secondary data.

Primary Data

That are generated by collecting data from organization. Primary data are generated within the organization. The organizations practical experience, observation, and face-to-face interview with our own web administrators helped us generate the primary data.

Secondary Data

Secondary data are generated by studying different articles, newspapers, research papers and of course information collected via Internet. Data, facts and statistics collected from different web sites and sources made us understand the project better.

1.5 Limitations of project:

1.6 Process model:

A process of model software alternates sequence for the whole life time. So it is sometimes called the product life cycle. In many cases the initial software requirements are clearly defined, but overall development opportunities the effort precludes a complete linear process, in addition, in the case of this, the organization selected a process model, in addition to providing a limited set of software functionality and then the release of software that can be perfect and extended to a compulsory requirement and that is designed to produce evolutionary model software. The “Incremental process model” is a software development method that is combination of iterative development process model and sequential linear development model. This phase also includes understanding the system requirements by continuous communication between the customer and the system analyst. At the end of the model, the product is deployed in the identified market.

Design

The Design phase starts with the conceptual design in the baseline incremental and involves architectural analysis, logical design of modules, physical product code conversion and the final test in the subsequent incremental model.

Requirements of Software are first broken down into several modules that can be incrementally constructed and delivered. At any time, the plan is made just for the next increment and not for any kind of long term plans. Therefore, it is easier to modify the version as per the need of the customer. Development Team first undertakes to develop core features (these do not need services from other features) of the system.

Once the core features are fully developed, then these are refined to increase levels of capabilities by adding new functions in Successive versions. Each incremental version is usually developed using an iterative waterfall model of development.

As each successive version of the software is constructed and delivered, now the feedback of the Customer is to be taken and these were then incorporated in the next version. Each version of the software have more additional features over the previous ones.

Code

The Code phase refers to production of the actual software product at every incremental phase. In the baseline incremental, when the product is just thought of and the design is being developed a proof of concept is developed in this phase to get customer feedback. Then in the subsequent spirals with higher clarity on requirements and design details a working model of the software called build is produced with a version number. These builds are sent to the customer for feedback.

Evaluation and Risk Analysis

Risk Analysis includes identifying, estimating and monitoring the technical feasibility and management risks, such as schedule slippage and cost overrun. After testing the build, at the end of first iteration, the customer evaluates the software and provides feedback.

The following illustration is a representation of the Incremental Model, listing the activities in each phase.

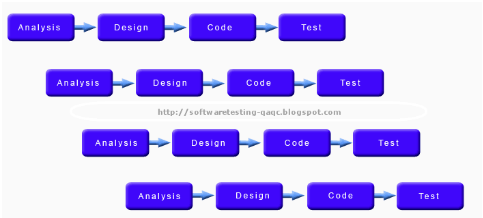


Figure 1.1: Incremental Process Model

Figure 2.1: Incremental Process Model Figure 2.1 shows the incremental process model as this project is too much sensitive for costs and security. As here there need to tight security so this analysis and planning will be change anytime. Because this model has four phases: analysis phase, design analysis phase, code phase and test phase. So when any requirements will come we easily analysis and edit. In first to last all team members are working at a time. It allows for incremental releases of the product, or incremental refinement through each of the iteration around the model. To use this model I easily analysis the requirement information and in parallel time I will work with my interface, design, get the clients recommendation and thesis about the market value and security. All work will be done at a time and make a good communication with client. This process model always run in thesis based when any problem found its will change, so following this model we need to more time to build a final version of project.

1.6.1 Features and Advantages of Extreme software model

The advantages of this process model describe below:

* Development process is too reusable from other models because here developer and customer have direct interaction to build a system.
* Customer can see the working product at the early stages of software development life cycle
* Project can be separated into several parts, and more risky of them can be developed earlier which decreases management difficulties
* Larger projects / software are created and handled in a strategic way. For my project it’s too much helpful because this project always run in market analytical way.
* Risk evaluation is proper so there is no way for overlap the budget estimation and don’t think about the market priority.
* Easily add many more features in a systemic way if it is valuable for market oriented and user friendly
* Has room for customer feedback and the changes are implemented faster.
* Risk reduction mechanisms are placed in this system.

1.7 Feasibility Study

Feasibility study is made to see if the project on completion will serve the purpose of the organization for the amount of work, effort and the time that spend on it. Feasibility study lets the developer foresee the future of the project and the usefulness. A feasibility study of a system proposal is according to its work ability, which is the impact on the organization, ability to meet their user needs and effective use of resources. Thus when a new application is proposed it normally goes through a feasibility study before it is approved for development. The document the feasibility of the project that is being design and lists various areas that were considered very carefully during the feasibility study of this project such as technical, economical and operational feasibilities. The following are its features:

1.7.1 Technical feasibility

The system must be evaluated from the technical point of view first. The assignment of this feasibility must bases on an outline design of the system requirement in the terms of input, output, programs and procedures. Having identified and outline system, the investigation must go to suggest the type of equipment, required method developing the system, of running the system once it has been designed.

Technical issues are raised during the investigation are:

* Does the existing system technology sufficient for the investigation are?
* Does the existing technology sufficient for the suggested one?
* Can the system expand if developed?

The project should be developed such that the necessary functions and performance are achieved within the constraints. The project is developed within latest technology. Through the technology may become obsolete after some period of time, due to the fact that never version of same software supports older versions, the system may still be used.

1.7.2 Economical feasibility

The developing system must be justified by the coast and benefit. Criteria to ensure that effort is concentrated on the project, which affect the development of a new system, is the cost it would require.

The following are some of the important financial questions asked during preliminary investigation:

* The cost conducts a full system investigation.
* The cost of hardware and software.
* The benefits in the form of reduced costs or fewer costly errors.

Since the system is developed as part of project work, there is no manual coast to spend for the proposed system. Also, all the resources are already available, it gives an indication of the system is economically possible for development. Our developed system is economically feasible. When we compare the total cost and benefits from the system that time we see that our client will be beneficial from this system.

1.7.3 Operational feasibility

This includes the following questions:

* Is there sufficient support for the users?
* Will the proposed system cause harm?

The project would be beneficial because it satisfies the objectives when developed and deployed. All behavioral aspects are considered carefully and conclude that the project is behaviorally feasible. The function is user friendly like manager can easily register employee disable and enable user. User can easily operate the proposed system because the system is user friendly. If the stuff of the organization has the basic to computer knowledge they could operate the software easily. Every features and the activity that are combined within the system is designed and developed belongs to previous format they had used with a more attractive user interface.

Chapter-2

ORGANIZATION

2.1 Organizational Overview

DataTrix Soft is incorporate in late 2012 has emerged as a premier ICT Solution Provider in Bangladesh successfully serving customers around the World. DataTrix Soft highly determine to innovation development and provide information technology related services, including Computer Systems, Software Development, Networking Systems, Cloud Computing and IT Training. It’s main priority is it’s client and it always thinks about their profit and try to provide them the best service. DataTrix Soft is opening the door to educate and empower the youth with the knowledge and power of coding. They provide the best coding and programming related training of the country. They also organize free workshops, seminars and inspirational/motivational talks on a regular basis on different technology topics to promote coding.

2.1 Our Vision

We firmly believe in the philosophy of ‘Make our client happy ’. We take pride in a team of highly qualified, skilled and motivated professionals who are encouraged to lead, innovate and excel. Our team consists of top professionals who share a common vision and passion, providing our clients with critical insights and advise to succeed in today's competitive environment. We believe in delivering expertise, excellence services through our past experience and providing the highest and best end use of services to our client.

* To build a trusted IT Companies in Bangladesh
* To be the largest Software Companies in Bangladesh
* To be the best choice for people when they like to Software Development
* To be the largest SEO (search engine optimization) Marketing Company in Bangladesh To be the largest IT company in World.