

CASE STUDY I

A large firm faced challenge in developing a GUI intensive educational application. It covers topics in mathematics right from the basics. Hence, the target audience covered is children from elementary school to high school. Lot of emphasis was laid on concept clarity through extensive animation. The animation is supported by voice and text balloons.

For this firm wishes to cover topics like

1. Addition
2. Substraction
3. Division
4. Multiplication
5. Trigonometry
6. Permutations and Combinations

Innovative lesson plans were incorporated to help students develop math skills in a quick and easy way. The widgets in a very interesting and interactive way teach how to do things rather than learn things. These widgets have the added ability to print flash cards. These can be used as an effective learning tool. All the calculations are spoken in a robotic voice that is accent-neutral.

Schools require different installs should be created.

1. Elementary
2. Middle
3. High school levels
4. Deluxe level

The Deluxe level has all the levels.

Design a system such that the widgets should be visually attractive and 'child-friendly'.

CASE STUDY II

A very large organisation got an opportunity to work with a U.S. based full service medical education company that specializes in developing and executing promotional medical education tactics. They want to develop applications based on their services which included upgrading their existing systems as well as built new ones from scratch.

They want to follow the 3-tier(s) architecture to implement all core programming and coding skills into real world applications.

The top most level of the application comprised the presentation tier, commonly called the user interface. The main function of the interface was to make it easier for user to translate tasks like

1. Uploading CV
2. Flash presentations
3. Taking quiz
4. Providing online registrations
5. Help organize medical meetings
6. Various other similar tasks

The middle layer or the Logic/Application tier helped coordinate the application, make logical decisions and evaluations, and perform calculations. All information was stored and retrieved from a database or file system known as the Data tier. All information is passed back to the logic tier for processing, and then eventually back to the user.

Design a system which will meet all the above needs of the company. Regression Testing should be performed to evaluate and ensure product quality.

CASE STUDY III

A company want to develop a complete mailing service that enables parents to create/manage and approve messages and contacts for kids to communicate. No unauthorized person should contact the child and it should have a high-quality safe e-mail messaging experience. The child should get protected from spam and undesirable emails.

The email messaging service should have following characteristics: 1.

Animated characters

2. A rich graphical interface

3. Standards-based e-mail

4. Greetings clip-art

5. Fun emotions

Design a system where the changes should made to the existing active system without affecting the real users and crashing of the online system.

CASE STUDY IV

Companies worldwide increasingly rely on testing to screen prospective employees and evaluate existing staff. An IT firm, a fast-growing software development firm provides an online solution for creating and administering tests to meet this growing need. Following the brilliant debut of its Web-based testing solution, the firm pushed ahead for the delivery of version two of its application.

More companies are recognizing the benefits of using online tests to evaluate job candidates and train current staff. Companies have turned to these kinds of tests for several reasons:

- The tests objectively measure job-related skills.
- Companies can administer online tests to large numbers of people simultaneously, making the tests a cost-effective alternative to other assessment tools.
- Companies can provide rapid feedback to participants.

Design the system to meet the goal within the constraint of an aggressive delivery schedule, the developers needed to streamline the development process. They wanted to make continuous, rapid improvements, while providing a scalable infrastructure to support future projects.

CASE STUDY V

An IT company had big plans for making better use of technology to enhance teaching and learning. The IT staff needed to standardize district computers and implement tools for monitoring and managing technology before it could move forward with new teaching aids.

With standardized technology in classrooms, teachers should be able to enhance teaching with technology.

The results can include more time for the IT staff to help teachers with technology.

Design a system if IT staff was not able to exercise technology management efficiencies in such an environment, every school, and even every classroom, presented a unique set of management challenges that consumed inordinate amounts of time.