

Project:

As part of our ongoing effort to make the user experience better, we are currently revamping the user experience. Our users have the ability to enter free form text in various forms to capture notes. Currently this free form text is not using a rich text editor, we would like to allow our users to use a rich text editor that will allow them to:

- Support formatting such as underline, text color, and text size
- Support hyperlink
- Support image embedding
- Support spell check

Your job is to

- Evaluate rich text editors for html
- Propose options to store the text and the formatting of the text separately, so the interpretation of the formatting can be done based on device displaying the text.

Technologies to use and learn

- Html
- Javascript
- css3

Project:

Develop an Android-based smart surveillance application with Cloud integration. The app will monitor its environment for activity and upload a report for the sensor triggered and associated evidence to a Cloud-based service. Additionally, the app will support on-demand request of sensor readings. Possible sensors readings to be integrated include:

- Audible Levels
- Ambient Light Level
- Visual Disturbances (motion)

Develop also, a Cloud-based service to digest uploaded reports and present environment details to the User. The User will be able to control aspects of the surveillance monitor such as thresholds for sound or motion. The service will enable the User to make and view the result of an on-demand request for sensor readings.

Project:

Data analytics for customer satisfaction improvements.

Continuous service improvement is an important element for any organization and a critical component of IT service management. This project will comprise of understanding the goals of a typical IT organization as it relates to customer satisfaction, defining the customer satisfaction metrics for success, gathering the data to feed the metrics, and delivering the metrics to decision makers for taking action.

Students should be proficient in one or more programming languages and have a basic understanding of the stages of a system engineering lifecycle: concept; requirements; architecture, design/development, integration, test/evaluation, maintenance. Project teams will be exposed to sometimes conflicting requirements, incompatible architectures, and disparate data sets to simulate real world experiences. As the project progress through each step of the lifecycle, there will be many opportunities to apply learned skills like case modeling, structured query language and operating system interoperability.