

Vertis Technology Solutions

Candidate Testing

Application Development

Scenario: Time Sheet Application

Introduction

This document provides candidates with an opportunity to demonstrate proficiency with full stack application development by providing a scenario from which they are expected to:

1. Generate requirements
2. Design and implement a database for the persistent storage of relevant information
3. Design and implement the presentation layer of a simple web application to allow users to interface with the application.
4. Design and implement the application layer of a simple web application that addresses the needs of the organisation, as put forward in the scenario and does so in a manner that is secure, efficient and consistent with industry standards.

Scenario

Vertis Technology Solutions needs a simple time sheet Web Application. The purpose of this application is to help log overtime for in office employees and to track billing hours for contractors.

Users of the application will first use a very basic login page to, login to the application with their existing universal employee credentials. After a successful login the user will be presented with a time sheet form. This form will capture the work title (a title given to the task that was to be completed), the client for whom the task was completed and a dynamic list of dates, start and end times and comments for each period spent on the job in question. The application should also calculate and display, the total time spent for each period, as soon as the user has finished entering the time.

Other information that should appear on the page, for verification purposes, but should already be stored and therefore not need to be filled out by the user is, the user's name and address and, when the client is selected from an existing list of clients the corresponding manager's name and position should also be displayed on the page.

After filling out the required information, users should then be able to submit the sheet and receive confirmation of submission.

Assignment

The database to be used must be MySQL. The application layer may be written in any language of your choosing. The presentation layer must be written using HTML, JavaScript and CSS. For the purposes of this assessment please create the database with all the appropriate tables and prepopulate an employees and a client's table, to simulate the existing employee and client information described in the scenario above. The database must include at least one stored procedure.

Candidates are free to use any additional technologies to aid them in the completion of this task. All industry standards with respect to storage of sensitive information, restriction, validation and filtration of user input must be observable within the application.

NB. Incomplete submissions will still be considered, however greater importance is to be placed on functionality than on presentation.

You are invited to submit a complete and working application; based on the scenario described above, to jobs@vertisjm.com, for consideration.