

Pre-interview assignment

To be completed by each applicant

Purpose <ul style="list-style-type: none">❖ To demonstrate your ability to work with databases❖ To demonstrate your ability to build web interfaces❖ To demonstrate your ability to meet strict deadline		During your interview, you will be asked to demonstrate and defend your work.	
The problem <p>A college administrator wishes to have a web application to allow teachers to query student demographics information in real time. The teachers should be able to select a field and do pre-defined operations on that field.</p> <p>On loading, the entire database of students will be on the page, the queries will be performed by filtering the information using pre-defined operators.</p>	What you are to do? <ul style="list-style-type: none">❖ Build a web interface to allow teachers to query the information in real time❖ Build relational DB with the information provided in the attached Excel File Hint <p>Build a combo box with the operators: Equal, Not Equal Greater than, Less than, Min , Max, Range</p>	Sample queries <ul style="list-style-type: none">❖ Identify all students residing in a particular zip code❖ Identify all the male over a certain age❖ all students who are not from a given state❖ List of subjects for which student grades exist❖ Highest Grade and student for each subject❖ All Students that received a grade within a range <u>Bonus</u> <ul style="list-style-type: none">❖ Display GPA for each student<ul style="list-style-type: none">○ 90+ = 4 Points○ 80+ = 3 Points○ 70+ = 2 points○ 60+= 1point○ >60 = 0❖ List of enrolled students per subject❖ Second Highest Grade and student for each subject	
Time – 48 hours		Grading criteria: Functionality and Elegance	