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## RONNIE JONES

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### **Required Skills:**

(List skills needed) – To Be Discussed

### **Preferred Team Communications:**

Conference Call, to be discussed

### **Data Sources:**

FHIR Data sources.

### **Other Items:**

Project has time zone flexibility. Mentors and students will determine a good time for virtual meeting

### **Team Info:**

Needs a Developer, DBA, Project Manager. Allows one team of 4-6 members.

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## IDENTIFY RISK FACTORS FOR PATIENTS WITH HYPERTENSION

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Patients with Hypertension requires that they regularly review their systolic pressure / diastolic pressure number to ensure they are being controlled. But knowing your numbers is not enough. There are other factors that can put a patient with high blood pressure at great risk for secondary conditions such as kidney related problems. One possible solution to help support the hypertension management is to utilize an application that can calculate a patient's risk factors in developing secondary conditions based on factors such as age, race, family history, weight, exercise, tobacco use, amount of sodium in the diet, amount of potassium in the diet, amount of alcohol use, stress level and other chronic conditions such as diabetes.

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## PROJECT OBJECTIVES

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Design and develop a web-based application that based on various collected patient information can calculate a risk factor of someone without an existing case of hypertension, their chances of developing the disease and someone current managing the disease their chances of developing other complications such as stroke, heart attack, kidney failure. The application should present the user with a score and the supporting details that make up that score. The higher the score, the higher the risk and the more likely developing the condition.

The following risk factors should be included but you are not limited to just them:

- Age
- Race
- Family History
- Being overweight or obese
- Not physically active
- Exercise
- Tobacco use
- Sodium use (Too much)
- Potassium in diet (Too little)
- Alcohol use
- Stress level
- Other chronic conditions

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## SUCCESSFUL PROJECT

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A completed UI and 30% of all risk factors used in the calculation of the overall patient risk.

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**Intellectual Property:** None