**Problem Description:**

* The current problem is that there are currently discrepancies in overtime calculations despite precise record-keeping, there are multiple errors in overtime pay that have surfaced.
* Employees in the company have reported numerous times that their hard-earned overtime hours were not accurately reflected in their paychecks. This has led to heated discussions during break times and after-shift gatherings.
* A meeting was held to find meaningful solutions on how their overtime for different shifts can be calculated accurately and provide transparency on retirement plan contributions.



**Research Integration:**

* The data that will be required include the number of hours an employee has worked, the shift they worked, the hourly pay rate, the regular pay and the overtime pay.
* The program will calculate regular pay based on the standard hourly rates an employee works in a week.
* The program will have to calculate the overtime pay based on the shift an employee worked and work hours that exceed 40 hours a week.
* An employee has the option to opt into the retirement plan and should they decide to opt into it then 5% of their gross pay will be deducted and put towards the retirement plan.



**Viability Evaluation:**

* Due to the nature of the program, it is feasible to develop a program to address the current problem since there is currently no system in place that accurately calculates overtime pay for an employee.
* The reason for it being feasible is that overtime pay has been calculated manually which has led to overtime not being accurately calculated and has led to the dissatisfaction of multiple employees since their pay is not being accurately calculated.
* The current problem can be solved with current technology within the constraints. The program does not require a lot of resources and is very easy for management to use. It does not require a lot of resources to create, and it will end up being extremely useful since it will accurately calculate employee's overtime pay.



**Evaluating the economic viability:**

* The benefits of the program do outweigh the costs of development. This is because should the problem go unsolved, it will harm the business due to unhappy employees which in turn affects the business quality of work and products.
* The main purpose of the program is to solve the problem that the business is currently facing as it can accurately calculate the bonus of employees and accurately display the amount they earned on their payslips without any discrepancies.
* The reason for the benefits outweighing the costs of development is that should they decide not to use the program then they will have to manually calculate the employee’s bonuses which leads to discrepancies which is how the problem initially started.



Solution Selection: