**Derricks Opany**

**Software Design- Assignment**

**1.Pick an appropriate software engineering methodology**

* For my Calculator project, I’m using Waterfall Model because this approach helps minimize errors and ensures that the final product meets the requirements and expectations of the end-users.
* Also, the Calculator app requirements are straightforward and well understood making it a good fit for the Waterfall model.

1. **Context Models**

**Calculator App**

**User**

1. **Interaction Models**

**User enters First value(number)**

**Calculator app interface**

**User launches Calculator App**

**User selects mathematical operator**

**User enters second value(number)**

**User selects “Equals” sign**

**Calculator performs calculations**

**Calculator displays results**

1. **Structural Models**

**User Interface**

* **Display**
* **Input**
* **Button**

**Computation**

**Memory Storage**

* **Save**
* **Retrieve**
* **Add**
* **Subtract**
* **Multiply**
* **Divide**

1. **Behavioral Models**

**User enters first number (displayed on the calculator’s screen)**

**Calculation is done and results are displayed on the calculator’s screen**

**User enters second number**

**User enters second number**

**User enters second number**

**Subtraction**

**Addition**

**Multiplication**

**User selects a mathematical operation**

**Calculator**

**User**