

# Coding Standards

To maintain code consistency, all team members must follow these guidelines:

- ✓ **Function Naming:** Use snake\_case with pascal case **Validate\_Phone\_Number( )**
- ✓ **Variable Naming:** Use descriptive lower snake\_case names ( **user\_input** ).
- ✓ **Constant Naming:** Use ALL\_UPPERCASE ( **MAX\_PHONE\_LENGTH** ).
- ✓ **Indentation & Spacing:** Use 4 spaces per indent ( no tabs ).
- ✓ **Header Files (.h):** Define function prototypes, macros, and data structures.
- ✓ **Implementation Files (.c):** Implement logic while keeping the main function.
- ✓ **Comments:** Use // for single-line comments and /\* \*/ for multi-line comments.
- ✓ **Error Handling:** Ensure all input validation & error handling are implemented.

## Example Naming Conventions :

### **Functions (pascal\_snake\_case):**

```
void Validate_Phone_Number(const char *phone);
ScamRecord *Hash_Map_Lookup(HashMap *map, const char *phone);
void Log_Admin_Action(const char *action);
```

### **Variables (lower\_snake\_case):**

```
int scam_count;
char user_input[20];
float suspicious_score;
```

### **Constants (ALL\_UPPERCASE):**

```
#define MAX_PHONE_LENGTH 15
#define SCAM_THRESHOLD 0.8
```

### **Struct Naming (PascalCase):**

```
typedef struct ScamRecord{
char phone[MAX_PHONE_LENGTH];
float risk_score;
struct ScamRecord *next;
}ScamRecord;
```

//typedef struct algorithm easy to look more than only struct

### **Enum Naming (PascalCase with ALL\_CAPS values):**

```
typedef enum{
SCAM_HIGH_RISK,
SCAM_MEDIUM_RISK,
SCAM_LOW_RISK
}ScamRiskLevel;
```