

S.No	Problem Statement ID	Problem Statement Name	Domain
25	CT-CWS - 02	Online child protection	Child / Women Safety

**Description:**

The **Online Child Protection System** is designed to safeguard children from online threats such as cyberbullying, grooming, exploitation, inappropriate content, and other forms of digital harm. This tool monitors online activities, detects potentially harmful interactions or content, and provides alerts to parents, guardians, or law enforcement agencies. Using AI and advanced algorithms, the system aims to create a safe online environment for children while respecting privacy and ethical considerations.

**Objectives:****1. Monitor Online Activities:**

- Track and analyze children's interactions on social media, gaming platforms, and other online environments to identify potential risks.

**2. Detect Harmful Behavior:**

- Use AI to detect threats such as cyberbullying, grooming, exploitation, and access to inappropriate content.

**3. Real-Time Alerts:**

- Notify parents or guardians immediately when harmful activities are detected.

**4. Promote Awareness:**

- Educate children and parents about online safety and best practices for secure digital interactions.

**5. Privacy Protection:**

- Ensure ethical handling of sensitive data to protect children's privacy.

## **Expectations:**

### **For Hackathon Participants:**

#### **1. Prototype Development:**

- Build a tool or app capable of monitoring and analyzing online content for harmful patterns.

#### **2. AI Integration:**

- Use natural language processing (NLP) and machine learning to detect harmful keywords, suspicious messages, or risky behaviors.

#### **3. Real-Time Reporting:**

- Develop an alert system to notify parents or guardians of threats in real time.

#### **4. User-Friendly Interface:**

- Design a dashboard that is easy to navigate for parents and provides clear reports of detected risks.

#### **5. Ethical Implementation:**

- Incorporate privacy-focused mechanisms to ensure children's data is secure and used responsibly.

### **For Organizations:**

#### **1. Proactive Protection:**

- Equip parents and guardians with a reliable tool to monitor and protect their children's online presence.

#### **2. Threat Mitigation:**

- Reduce the risk of online exploitation, grooming, and exposure to harmful content.

#### **3. Collaboration:**

- Facilitate cooperation between families, schools, and law enforcement to address online threats effectively.

#### **4. Customizable Monitoring:**

- Allow users to set preferences for what types of content or interactions should be flagged.

## **Expected Results:**

### **1. Enhanced Safety:**

- Ensure children are protected from online threats by identifying and mitigating risks in real time.

### **2. Parental Awareness:**

- Help parents and guardians stay informed about their child's online interactions and potential risks.

### **3. Empowered Children:**

- Educate children about safe online behavior and foster awareness of digital dangers.

### **4. Ethical and Responsible Use:**

- Provide a tool that respects privacy while offering effective protection.

### **5. Wider Impact:**

- Contribute to reducing cases of online child exploitation and promoting a safer digital environment for children.