

**SRM INSTITUTE OF SCIENCE AND TECHNOLOGY**  
**FACULTY OF SCIENCE & HUMANITIES**  
**DEPARTMENT OF COMPUTER APPLICATIONS**  
**(BCA & BCA GEN AI )**

**CODEWAVE '26**

**CAMPUS - CODE - LEAGUE**  
**NATIONAL LEVEL HACKATHON**

**PROBLEM STATEMENT FOR SOFTWARE DOMAIN**

**S1 - Smart Agriculture**

Agriculture faces challenges such as unpredictable weather, inefficient resource usage, pest control, and limited access to real-time information. There is a growing need for technology-driven approaches that can help farmers make better decisions, optimize resources, and improve productivity. Participants are encouraged to explore innovative solutions that leverage digital technologies to make agricultural practices more efficient, sustainable, and data-driven.

**S2 - Tourism and Safety**

Tourism is growing rapidly, but ensuring the safety and well-being of travelers remains a challenge due to unfamiliar environments, lack of reliable information, and emergency response limitations. This problem statement invites participants to design technology solutions that enhance tourist safety, provide real-time assistance, and improve the overall travel experience

### **S3 - Consumer Safety**

With the rise of digital marketplaces and diverse product ecosystems, consumers often face issues such as counterfeit products, misleading information, and online fraud. There is a need for innovative solutions that improve transparency, product authenticity, and consumer awareness to ensure safer purchasing decisions and stronger consumer protection

### **S4 - Sports and Fitness**

Promoting an active lifestyle and effective sports management remains a challenge due to low participation, lack of structured tracking, and limited access to personalized fitness insights. This problem statement encourages participants to explore technology-driven solutions that enhance sports engagement, fitness monitoring, and overall physical well-being

### **S5 - Education (Education ERP System)**

Educational institutions manage numerous academic and administrative processes such as attendance, records, communication, and assessments. However, fragmented systems and manual processes often lead to inefficiencies. Participants are encouraged to design innovative solutions that improve the efficiency, accessibility, and integration of Education ERP systems for students, teachers, and administrators.