PVProtect

SOFTWARE ENGINEERING PROJECT







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1-INTRODUCTION

The use of solar panels increased



Sustainable source of energy

Loss of efficiency

Switch
ON / OFF



PVProtect



1-INTRODUCTION

4 Real time factors:

- Battery
- Consumption
- Production
- Fire emergency

Key point: Minimize the usage of the solar panel while maximizing self consumption



1-INTRODUCTION

When does it activate or deactivate the solar panel?



LOW PRODUCTIVITY

HIGH
PRODUCTION/CONSUMPTION
RATIO
(BATTERY 100%)

FIRE EMERGENCY

ON

BATTERY NOT FULLY CHARGED

PRODUCTION/CONSUMPTION RATIO ≤ 1

NO FIRE EMERGENCY



2-0UR PROJECT

WHAT IS THE PROBLEM?

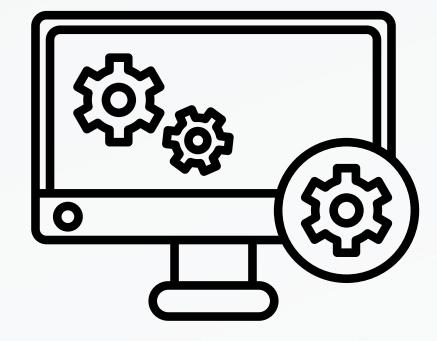


Loss of efficiency of the photovoltaic cells.

OUR PROPOSAL

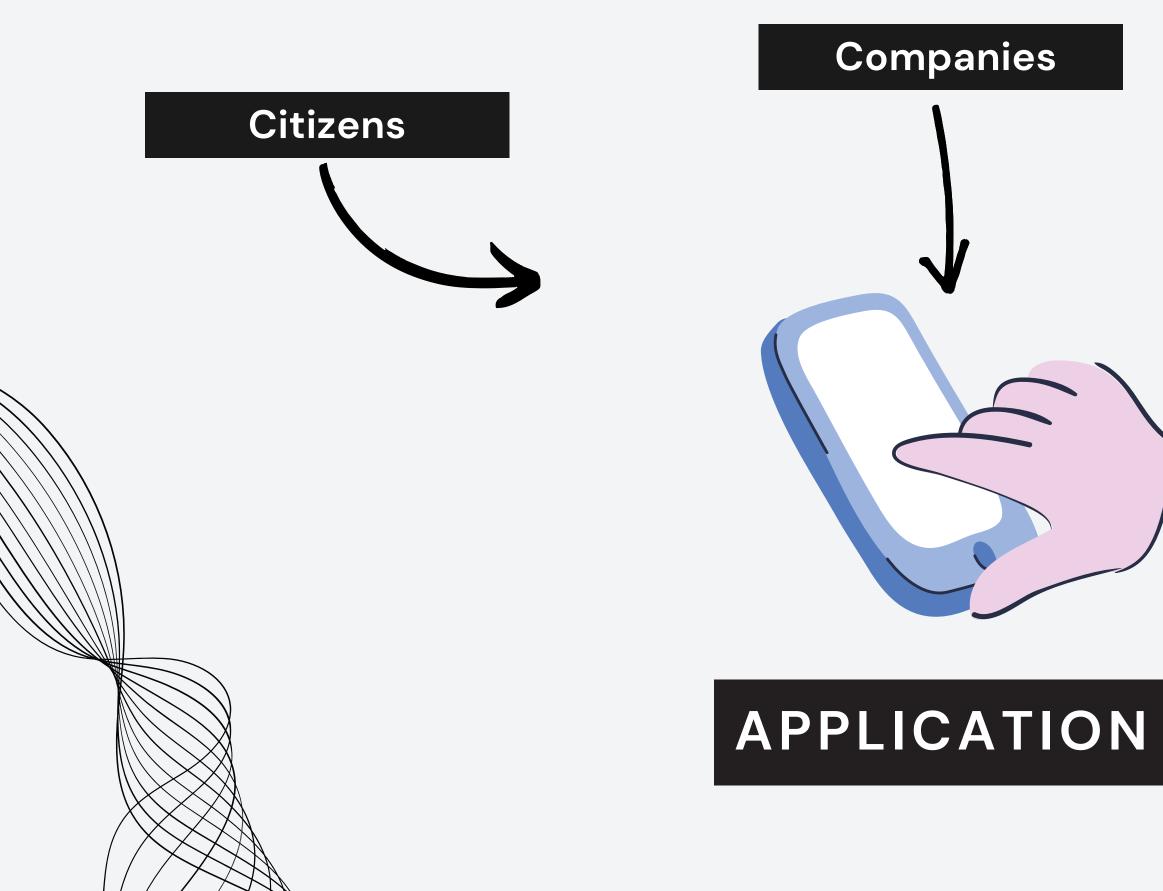
Software that controls whether to turn on/off to increase the lifespan of the panels.







3- USERS FOCUSED



Factories





4- OUR SERVICES













CONNECT & DISCONNECT THE PANEL

MEASUREMENT
OF THE ENERGY
PROVIDED BY
THE PANEL

WARNING
WHEN IT
DETECTS
SOME RISKS

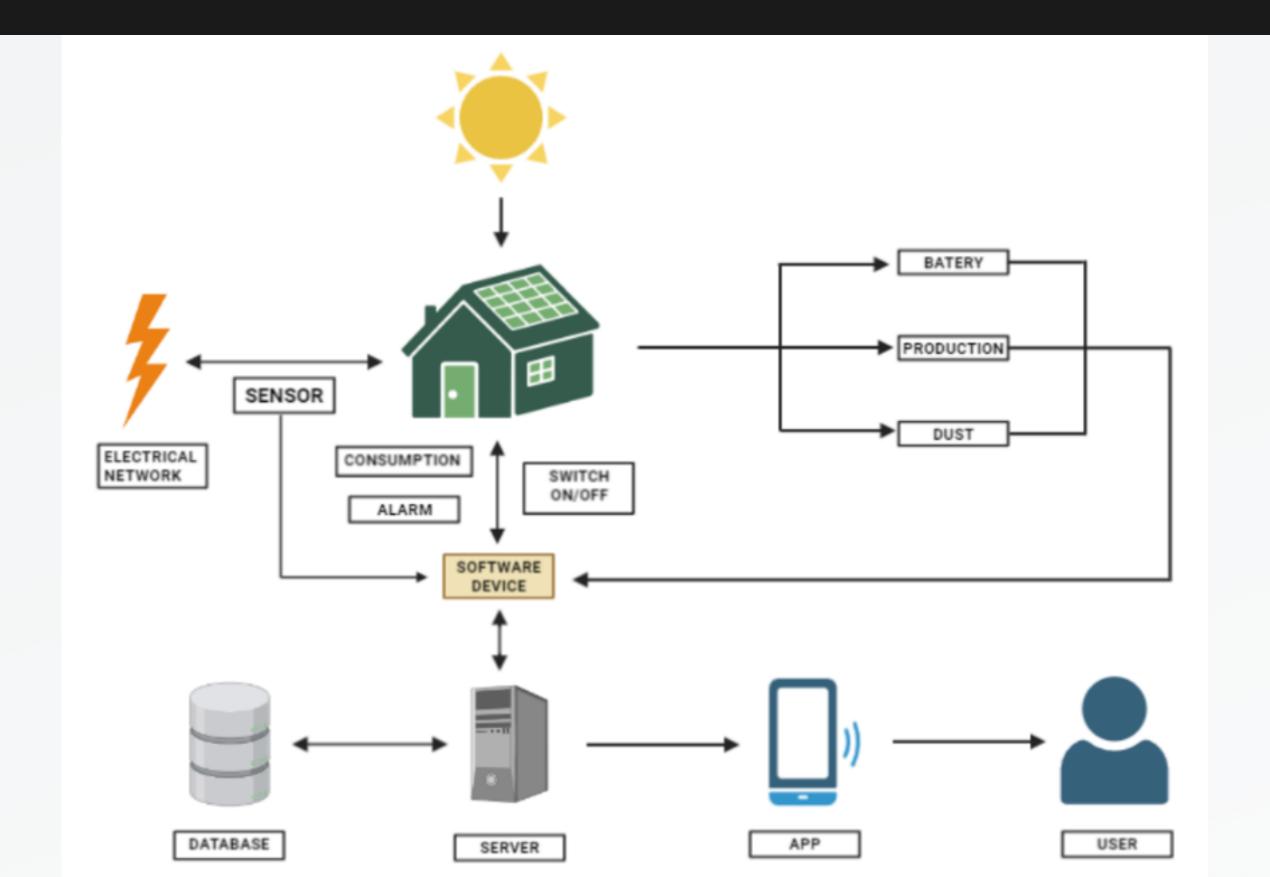
ENERGY CONSUMPTION

PANEL'S ON/OFF

PERFORMANCE OF THE PANEL



5. ARCHITECTURE







THANK'S FOR WATCHING

