COVID-19 DESIGN CHALLENGE #WORK RESUMPTION

1. THE CONTEXT

ALL MANUFACTURING ACTIVITES ARE AT HALT ALL ACROSS THE GLOBE DUE TO THE COVID 19 PANDEMIC. RELIANCE ON INFRASTRUCTURE RULES OUT WORKING FROM HOME POSSIBILITIES.

BLUE COLLAR, CONTRACT BASED WORKFORCE IS MOST AFFECTED DUE TO WAGE CUTS + JOB INSECURITY.



"HOW MIGHT WE HELP
FACTORIES/PLANTS
RESUME OPERATION
DURING THE COVID-19
PANDEMIC TO HELP
SUSTAIN EMPLOYEE
LIVES?"

2. EXISTING SOLUTIONS

GOVERNMENT ALLOWS SPECIAL PERMISSION TO PLANTS! FACTORIES TO OPERATE EVEN DURING A LOCKDOWN IF THEY MEET "PLANT OPENING PROTOCOLS".

WHAT ARE PLANT OPENING PROTOCOLS? (ROUGHLY)

- > PREMISE DISINFECTING
- > SOCIAL DISTANCING MEASURES
- > INCIDENCE MANAGEMENT RULES
- > HEALTH SCREENING
- > QUARANTINE PROTOCOLS









3. PRIMARY USER (S)







MEDICAL INSPECTOR



EMPLOYEE

4. PAIN POINTS

1> LACK OF ACCOUNTABILITY, STANDARDIZATION
2> IMPLEMENTATION + MAINTAINENCE
NEGLIGENCIES //FIRST TIME FOR EVERYONE.
3> LACK OF ACTIONABLE FEEDBACK

5. SOLUTION OVERVIEW

THE SOLUTION IS THAT OF A DIGITAL PLATFORM TO HELP RESUME FUNCTIONING OF PLANTS/ FACTORIES EVEN DURING THE LOCKDOWN AND IMMEDIATELY AFTER









6. USER NEEDS MAPPING

1. FOLLOWING RE-OPENING PROTOCOLS

Z. EMPLOYEE TRACKING + INCIDENCE MANAGEMENT

3. MONITORING THE RISK OF OPERATION AND OUTBREAK

NEED TO KNOW HOW TO COMPLY TO PLANT RE-OPENING PROTOCOLS

NEED TO KNOW THE STEPS TO CONFIRM WHEN AN EMPLOYEE IS SUSPECTED TO BE INFECTED

NEED A CLEAR PICTURE OF EMPLOYEE WELL-BEING UNDER THE OPERATION



NEED TO DOCUMENT THE MEASURES TAKEN TO DEMONSTRATE COMPLIANCE OF RE-OPENING PROTOCOLS

NEED TO CONTACT (HOSPITALS, LABS) AND AUTHORITIES TO INFORM IF AN EMPLOYEE IS INFECTED/ SUSPECTED

NEED TO EVALUATE THE RISK INVOLVED IN CONTINUING TO OPERATE

NEED TO GET THE MEASURES REVIEWED BY A MEDICAL INSPECTOR FOR RE-OPENING PERMIT

NEED TO MAINTAIN COMPLIANCE TO RE-OPENING PROTOCOL TO RENEW THE

PERMIT

NEED TO TAG + TRACK THE INFECTED EMPLOYEE AND POSSIBLE PEOPLE IN CONTACT TO PREVENT THE SPREAD THE OUTBREAK

MEDICAL INSPECTOR NEED TO INSPECT COMPLIANCE TO RE-OPENING PROTOCOLS OF A PLANT TO OFFER IT A PERMIT

NEED TO KNOW OF ANY INCIDENCES REGARDING INFECTED/ AT-RISK EMPLOYEES

NEED A CLEAR PICTURE OF EMPLOYEE WELL-BEING UNDER THE OPERATION

NEED TO RE-EVALUATE COMPLIANCE PERIODICALLY FOR PERMIT RENEWAL NEED TO HELP PROVIDE ACCESS TO TESTING CENTRES, HOSPITALS, ETC. DURING AN INCIDENT

NEED TO EVALUATE THE RISK INVOLVED IN CONTINUING TO OPERATE

EMPLOYEE

NEED TO LOG SELF EXAMINATION DATA LIKE TEMPERATURE, ETC. DAILY

NEED TO FEED IN PERSONAL DETAILS TO HELP IN TRACKING AND MANAGEMENT IF AT-RISK

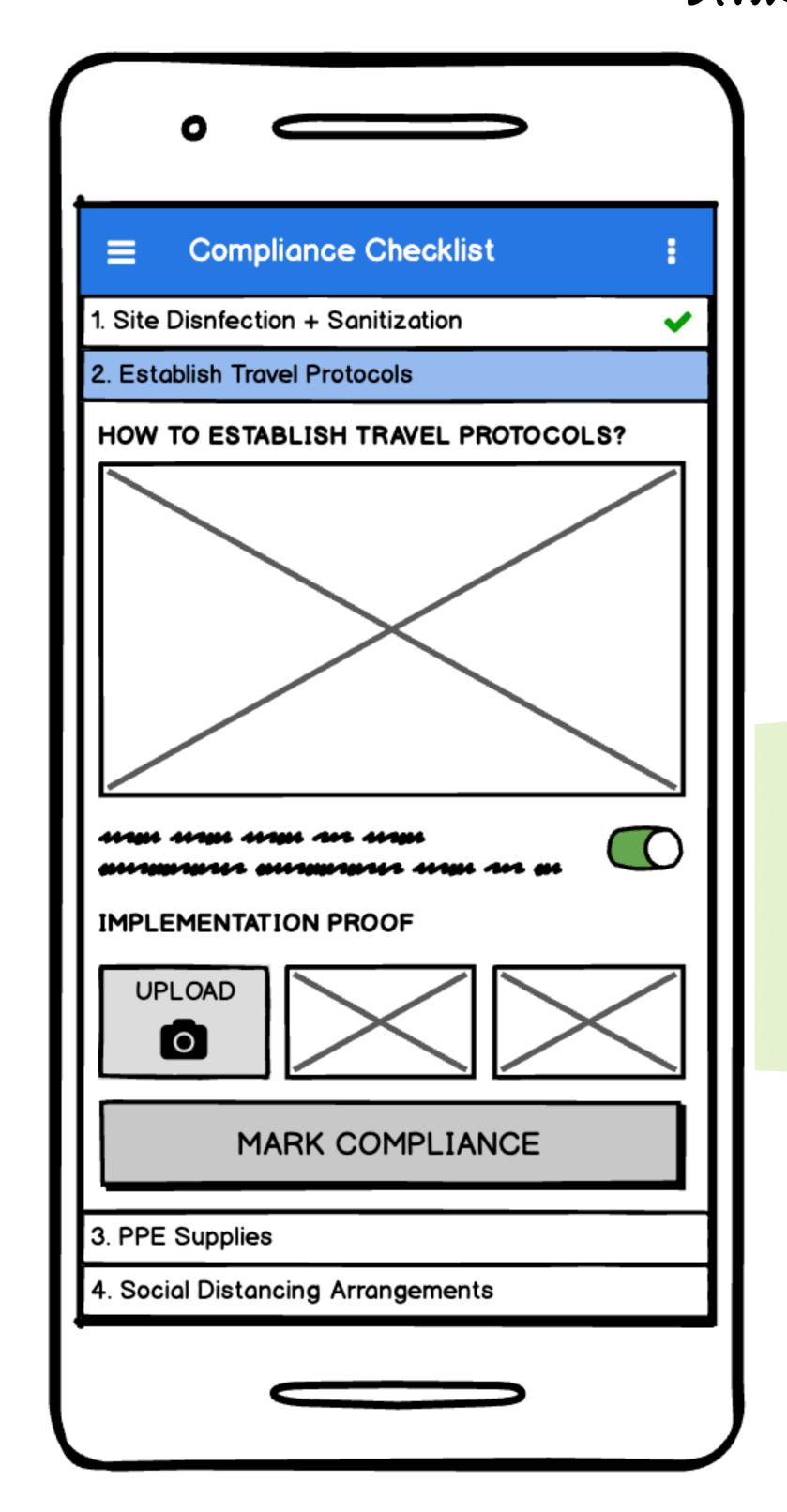
NEED TO KNOW WHETHER THE WORKPLACE IS SAFE TO OPERATE IN

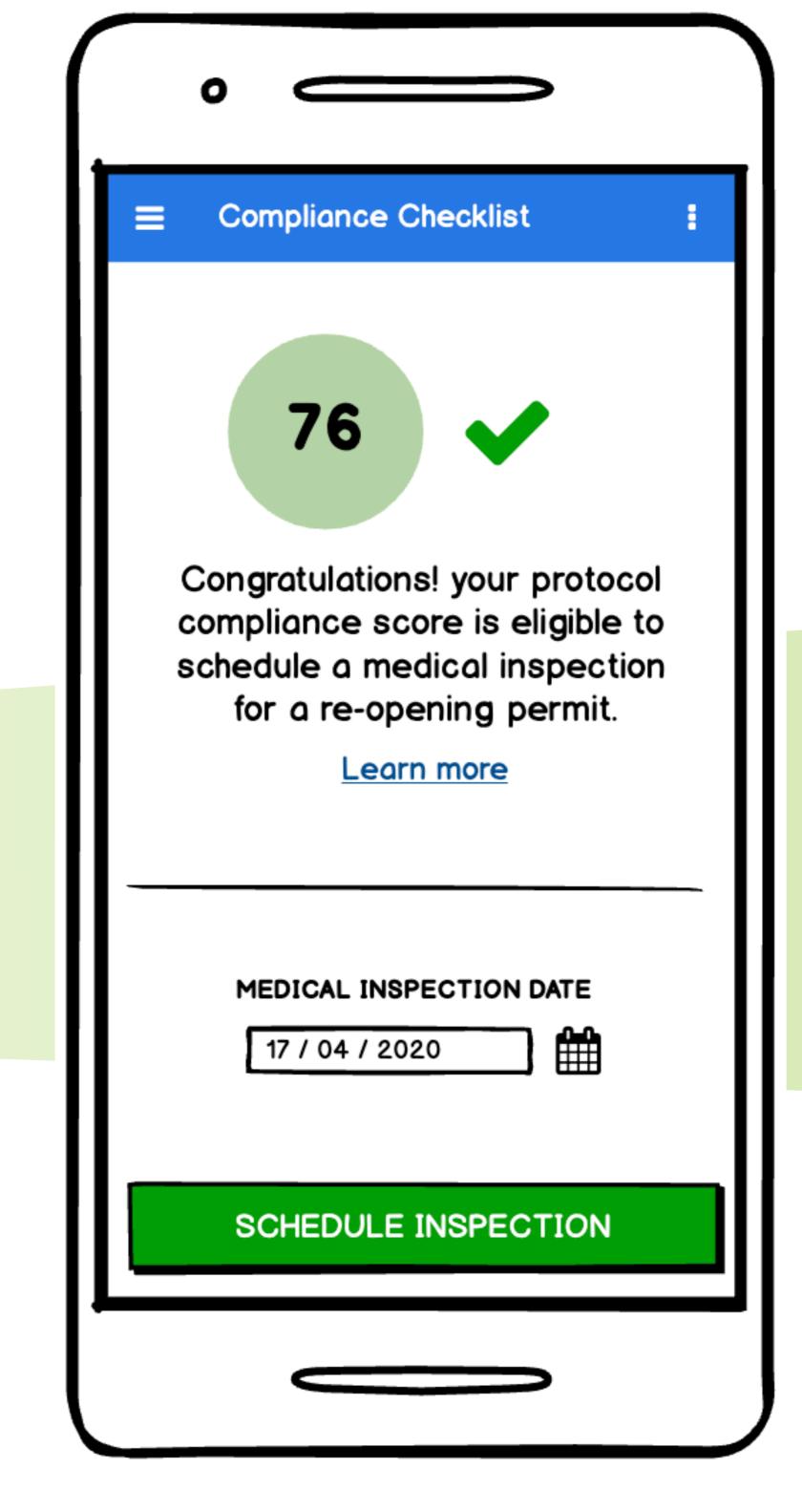
NEED TO LOG TRAVEL HISTORY RELATED DATA

1. FOLLOWING PLANT RE-OPENING PROTOCOLS + GETTING PERMIT



EMPLOYER/ STAKEHOLDERS





STEP-I

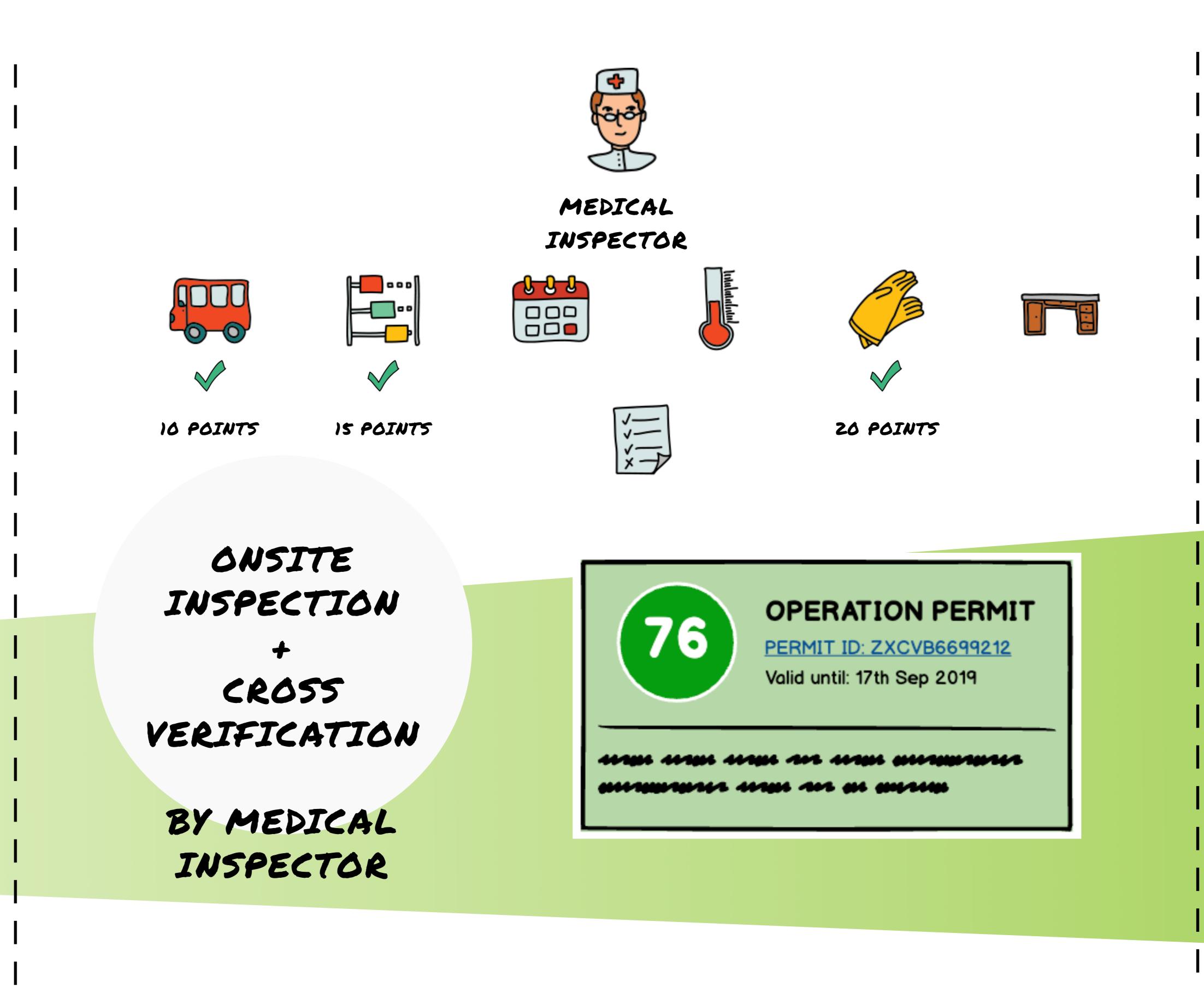
THE EMPLOYER OR BUSINESS
STAKEHOLDER CAN START
DOCUMENTING THEIR
COMPLIANCE MEASURES FOR
PLANT RE-OPENING PROTOCOLS.
THE PLATFORM GUIDES THEM
THROUGH SIMPLE CHECK-LISTS
AND PHOTO DOCUMENTATION FOR
EACH PROTOCOL TO CREATE A
CASE.

STEP-II

ONCE THE CHECKLIST IS
COMPLETED AND SUBMITTED, AN
AGGREGATE SCORE IS GENERATED
BASED ON THE COMPLIANCE
MEASURES TAKEN.
THE SCORE MUST MEET A
MINIMUM VALUE TO SCHEDULE AN
ON-SITE MEDICAL INSPECTION TO

VALIDATE CLAIMS AND GET A

RE-OPENING PERMIT.



STEP-III

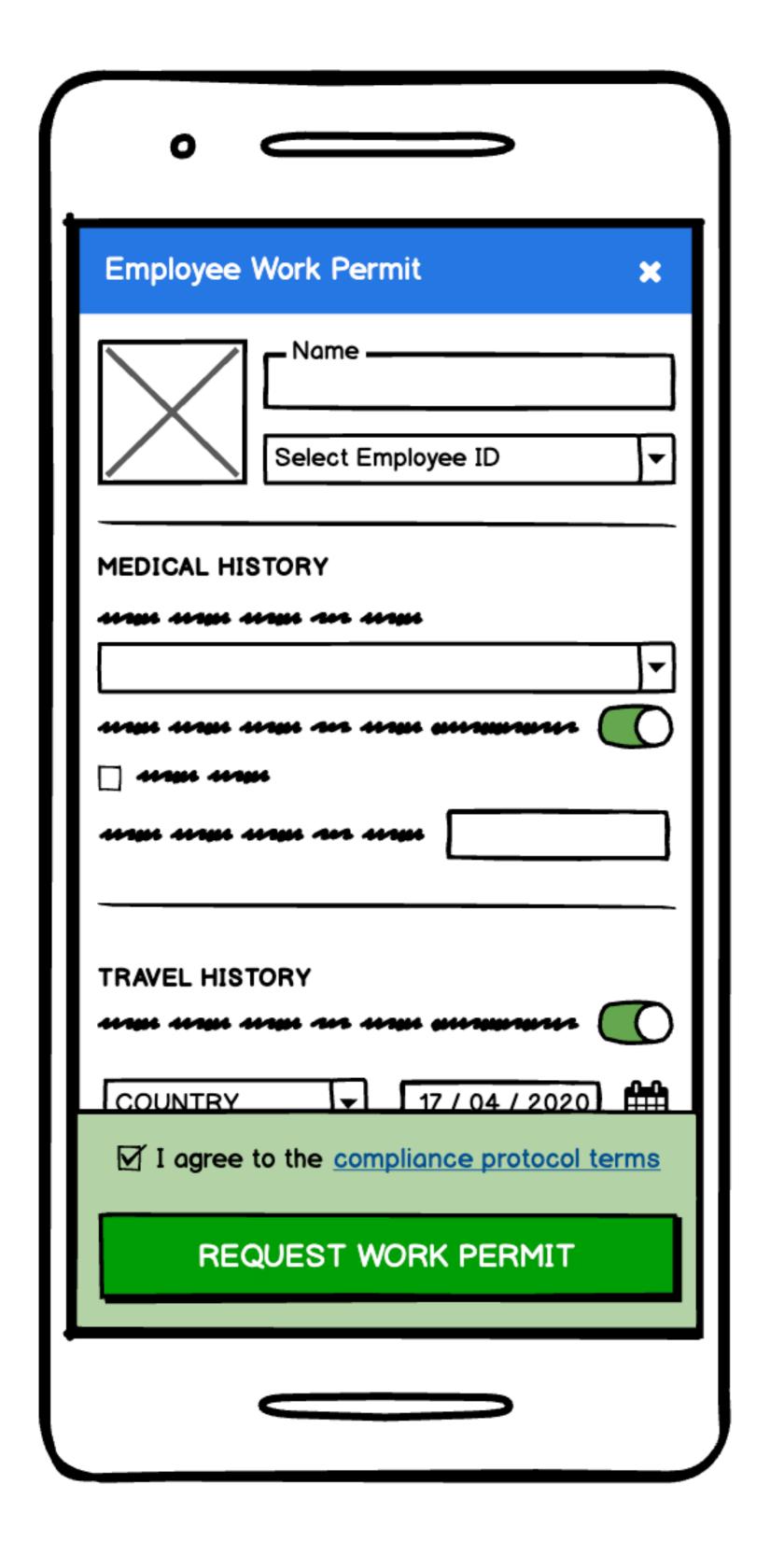
IF THE ONSITE INSPECTION IS SUCCESSFUL, CLAIMS ARE VERIFIED AND ALL PROTOCOLS ARE MET—THE PLANT IS GIVEN A OPERATION PERMIT THAT ENABLES THEM TO RESTART WORKING AS LONG AS PROTOCOLS ARE MET. THE VALIDITY IS LIMITED, AND NEEDS TO BE RENEWED WITH INSPECTIONS, PERIODICALLY.

PLANT OPERATIONS RESUMED

2.1 EMPLOYEE TRACKING + SELF SCREENING



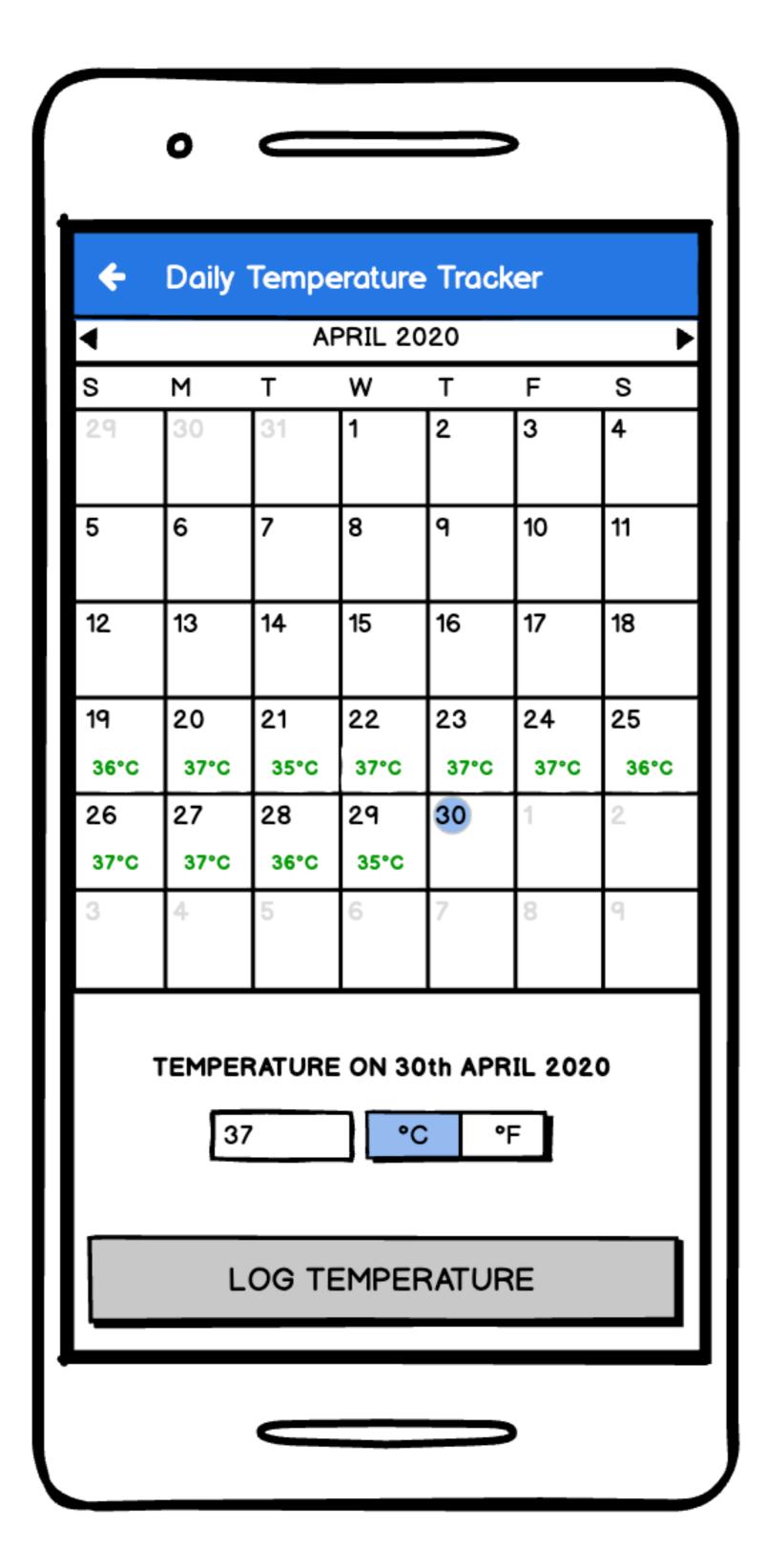
EMPLOYEE



WORK PERMIT REQUEST

ALL EMPLOYEES WHO WILL RESUME WORK ONCE THE PLANT IS OPERATIONAL WILL HAVE TO;

- REQUEST FOR A WORK PERMIT
- BY PROVIDING ADDITIONAL MEDICAL AND TRAVEL RELATED HISTORY ABOUT THEMSELVES.
- AGREEING TO COMPLY TO THE PROTOCOLS.



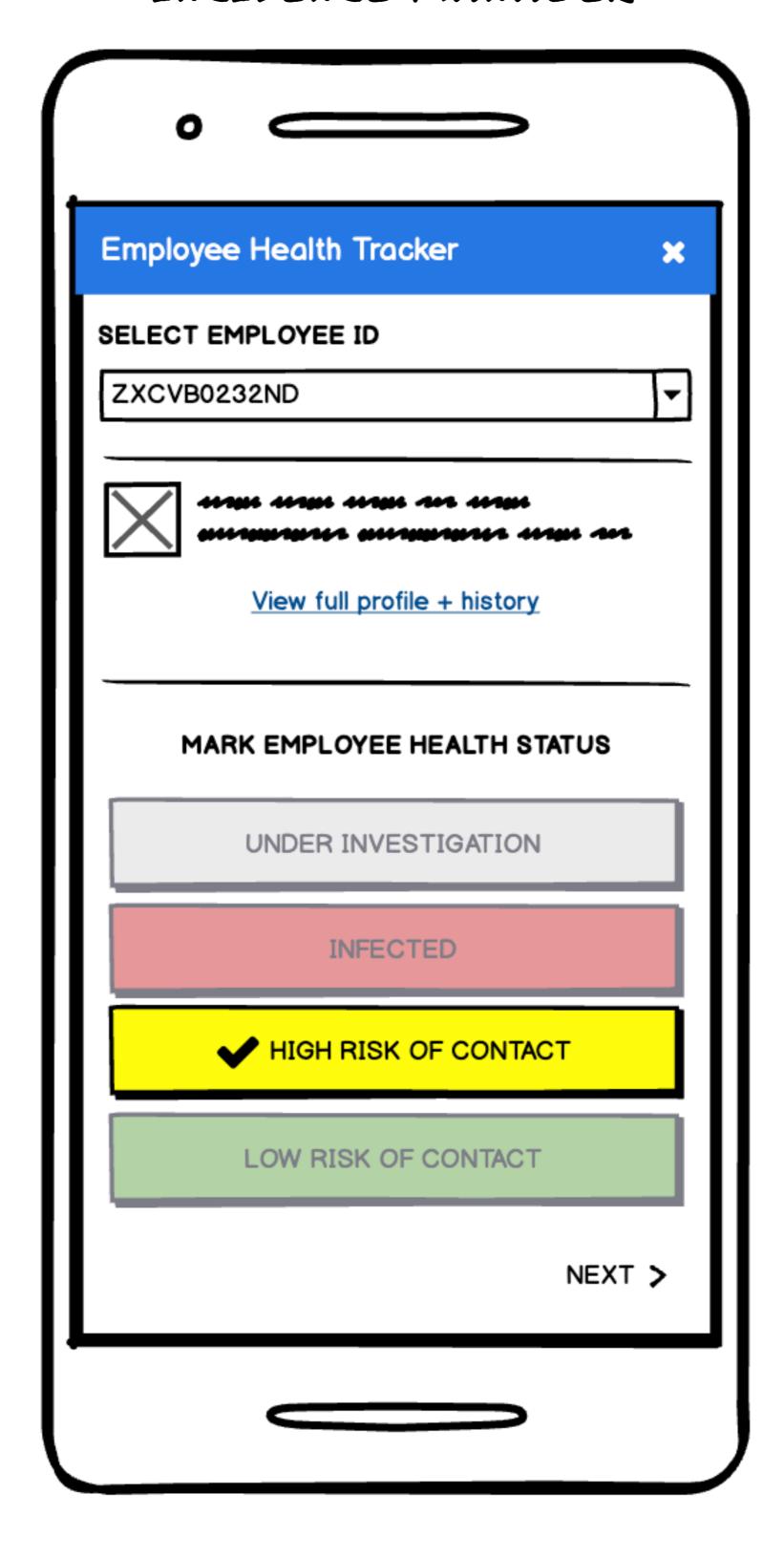
DAILY SELF EXAMINATION/ SCREENING BEFORE WORK

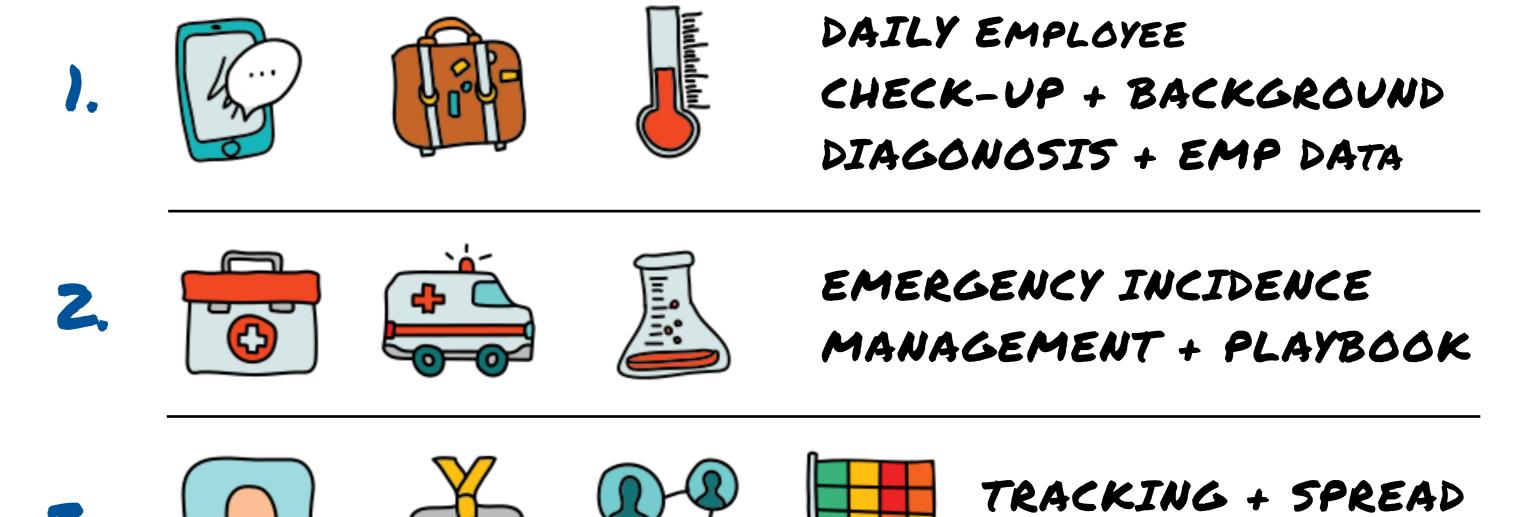
ALL EMPLOYEES MUST SELF SCREEN THEMSELVES FOR ANY SYMPTOMS AS WELL AS FEED BODY TEMPERATURE TO THE PLATFORM. IF SUSPECTED TO HAVE ANY SYMPTOMS, THEY MUST AVOID GOING TO WORK TILL CLEARED BY A DOCTOR.

2.2 INCIDENCE MANAGEMENT



EMPLOYER/ INCIDENCE MANAGER





MANAGEMENT

INCIDENCE MANAGEMENT

IN CASE OF AN INCIDENT OR SUSPECTED INCIDENT OF EMPLOYEE POSITIVE DETECTION, THE MANAGER MUST IMMEDIATELY MARK THE EMPLOYEE BASED ON A PRE-DEFINED SYSTEM (UNDER INVESTIGATION/INFECTED/HIGH RISK OF CONTACT/LOW RISK OF CONTACT). AND BASED ON THE SITUATION THE PLATFORM WILL PROVIDE GUIDANCE ON THE IMMEDIATE STEPS TO BE TAKEN, NEAREST TEST CENTRES, HOSPITALS.

3. MONITORING THE RISK OF OPERATING + OUTBREAK









EMPLOYEE



EMPLOYER/ STAKEHOLDERS

ENABLING DATA DRIVEN DECISIONS

IF ALL THE EMPLOYEES AND THEIR HEALTH STATUS' ARE TRACKED, A DASHBOARD CAN BE POPULATED WITH DATA THAT MIGHT ENABLE EMPLOYER, THE MEDICAL EXAMINER AS WELL AS THE EMPLOYEES ITSELF TO BE AWARE OF THE OVERALL HEALTH OF OPERATIONS AND TAKE CALLS ON CONTINUING TO RUN, OR ANTICIPATE AN OUTBREAK AND QUIT.

WHAT'S NEXT?

- > GET HANDS ON LIVE USER DATA TO VALIDATE THE NEEDS.
- > DETERMINE THE SCOPE OF THE PLATFORM
- > DETAIL/ DEVELOP OUT THE DIGITAL PLATFORM FOR POSSIBLE PRODUCTION