



# SpinApp



**SpinApp**   
Buildings

**SpinApp**   
Stations

**SpinApp**   
Schools

- **integration of perceived security convenience, energy and environment data**

**TCFD-ready**



# Climate change

- Threatens existence of all living beings, no one is excluded  
No action, lack of action = detrimental.  
COVID-19 is fundamental health crisis but unique opportunity to build back better
- Post-Covid-19 needs and habits, focus on health and healthy living conditions
- Build back better: green, digital, resilient
- Decarbonise and renovate



# Why & when renovate?

- Renovation
  - 1/3 of CO2 emissions of new construction
  - Neighbourhood-friendly (noise, dust, vibrations)
  - Shorter time frame
  - Less costly
- Key considerations:
  - Lifespan of the original structure?
  - Accurate building records available including past upgrades or renovations?
  - Community value of the building?

Today only 1,5% of construction projects are renovations



# Current performances

- Buildings are responsible of
  - 40% of energy consumption
  - 36% of GHG
- 2/3 of buildings is not energy efficient
- 85% of existing building stock fails carbon neutrality test
- 85% built before 2001
- 85-95% will stand by 2050
- Improvements are critical



# The outset

- The initial questions
  - How can we link security and convenience to design of stations?
  - How can we make station buildings more convenient?
  - Sensorial observations, accompanied journeys and visits of big and small intermodal stations, urban environments in Europe and Asia
  - Initially designed to assess and improve security in multimodal stations
  - Development of methodology and body of recommendations

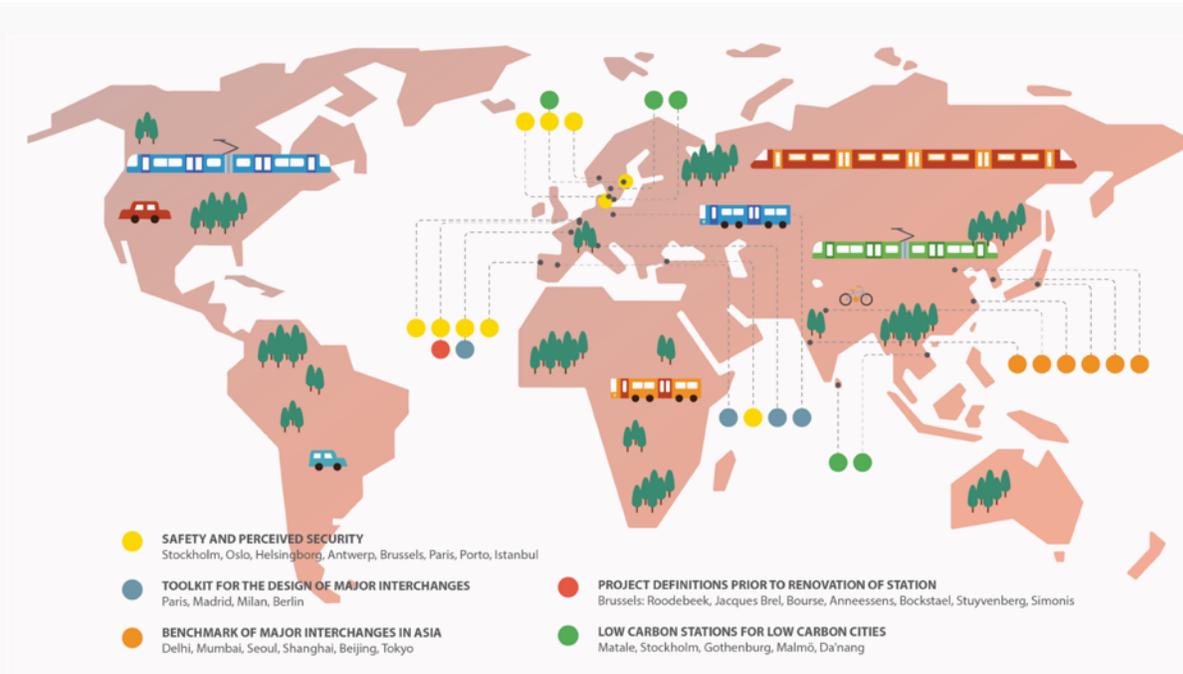


## SPIN UP



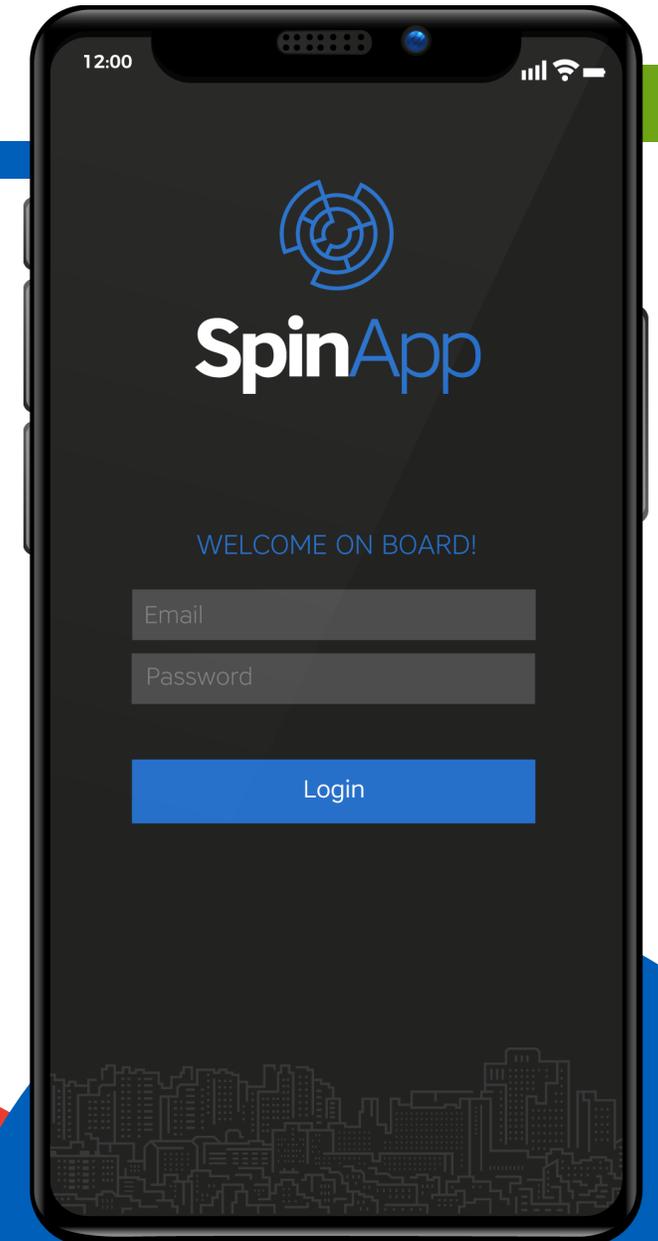
# SPIN APP links security, convenience, energy, water & waste

- Field research by means of accompanied journeys and visits
- Tested questionnaires deliver data from different world regions, North and South
- Recommendations meet international standards
- Scoping surveys provide a priorities-based summary for facility refurbishment



# SPIN APP what?

- Assesses passenger user expectations from sensorial observation, optimizes security, against lowest carbon footprint, improves ROI
- Compares results against international targets and standards
- Provides recommendations from a portfolio of 120+ recommendations and international best practices
- Focus on renovation, extension and refurbishment of existing stations
- Future fit: SDG-compliant and TCFD-ready

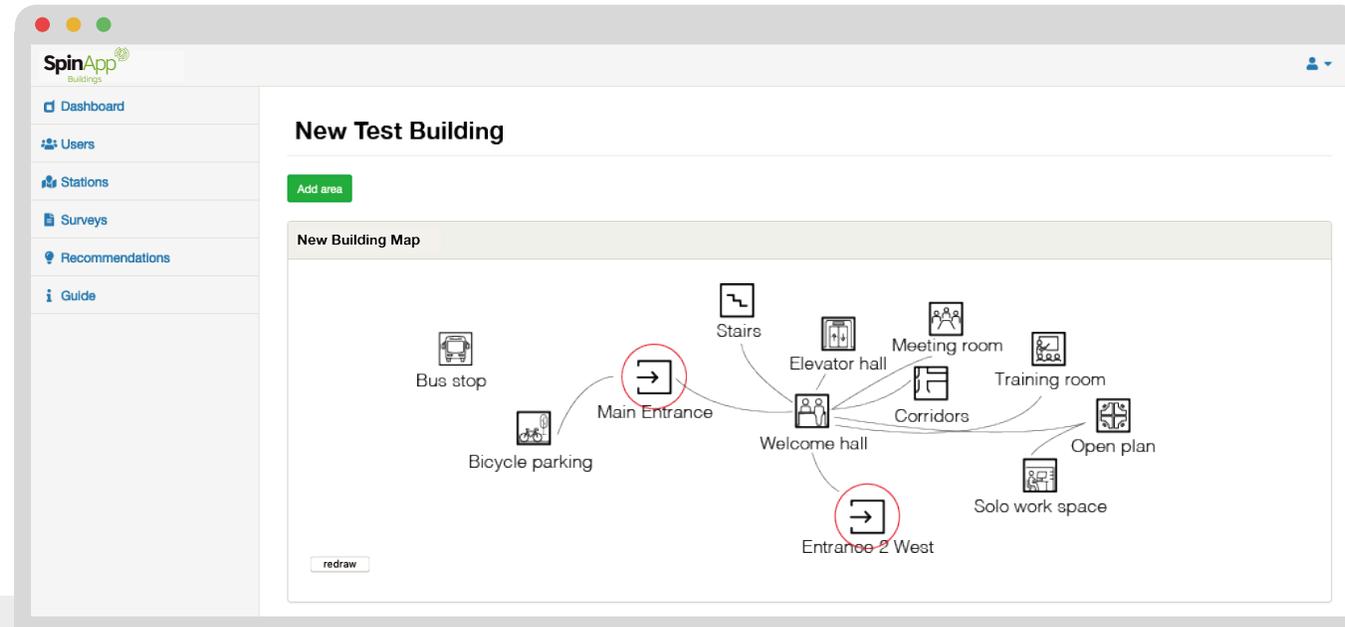


# Why a smart APP?

## ■ SPIN APP features

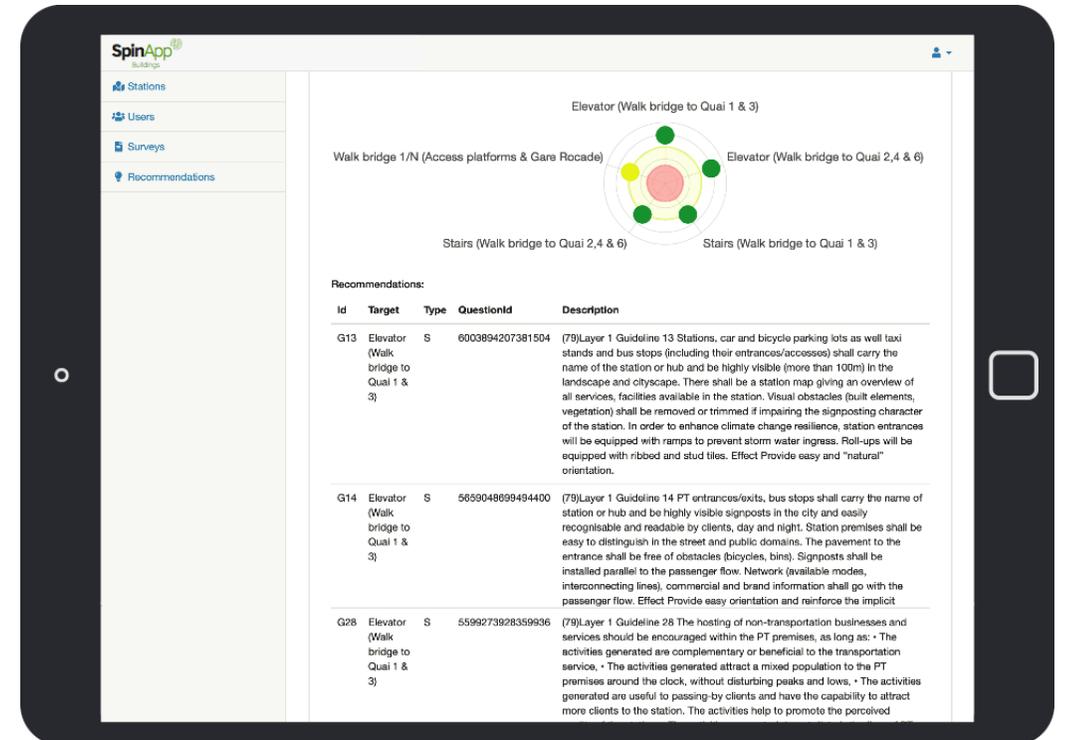
- map any station configuration and to multiple levels and layers
- independent of complexity and location
- web-based for easy collaboration
- connect geographies to present and understand recommendations

### Building geography overview



# Features of SPINAPP

- pragmatic & transversal
- covers essential pillars: security, energy, environment, water and waste
- easy to use and flexible
- spider charts report extent and priorities of required refurbishment
- executive summary
- priority Actions Plan: detailed recommendations per geography and per priority for:
  - daily operations, equipment, infrastructure
  - financial value of the assessment



# Impact

- SPINAPP generates
  - participation and cooperation between departments
  - optimal security/convenience against minimal carbon footprint
  - creates and stimulates awareness of interdependence of performance
  - puts user, visitor and passenger at core of undertaking



# Benefits

- SPINAPP is first in kind, its architecture is flexible
- locate and understand the flaws in the performance of their building
- measure the impact of this flaw in the system's budget
- substantiate the risks impacting the cost to make it climate resilient
- prioritise investments
- improves ROI of station



# SPIN APP – Future fit

## SDG-COMPLIANCE



- highlights the most supported SDGs
- prepares for sector leadership
- motivates team members for international collaboration

## TCFD-READY



- provides a template for governance
- creates a clear strategy for improvement
- prioritizes initiatives
- proposes metrics for further management

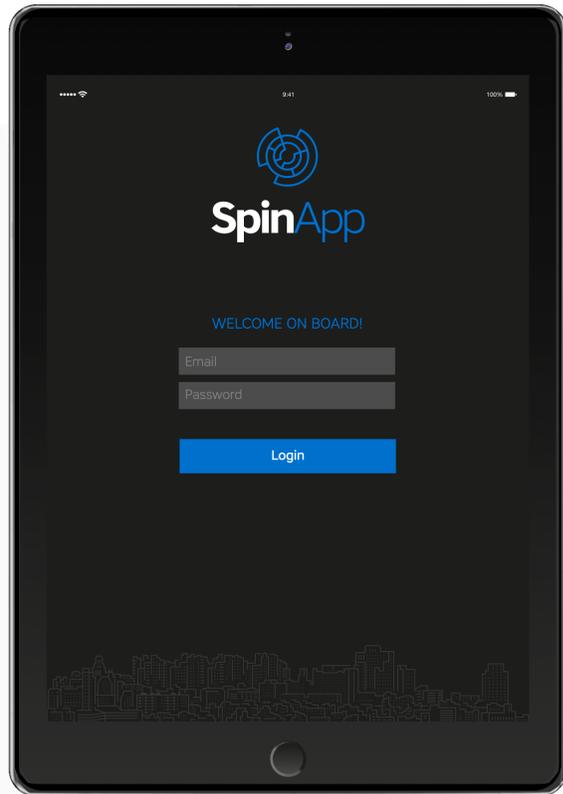
# The assessment process

- Depends on the size and complexity of the building
- The process is broken down 4 phases, with intermittent feedback stages
- The architecture of app is flexible, multi-layered and adaptable

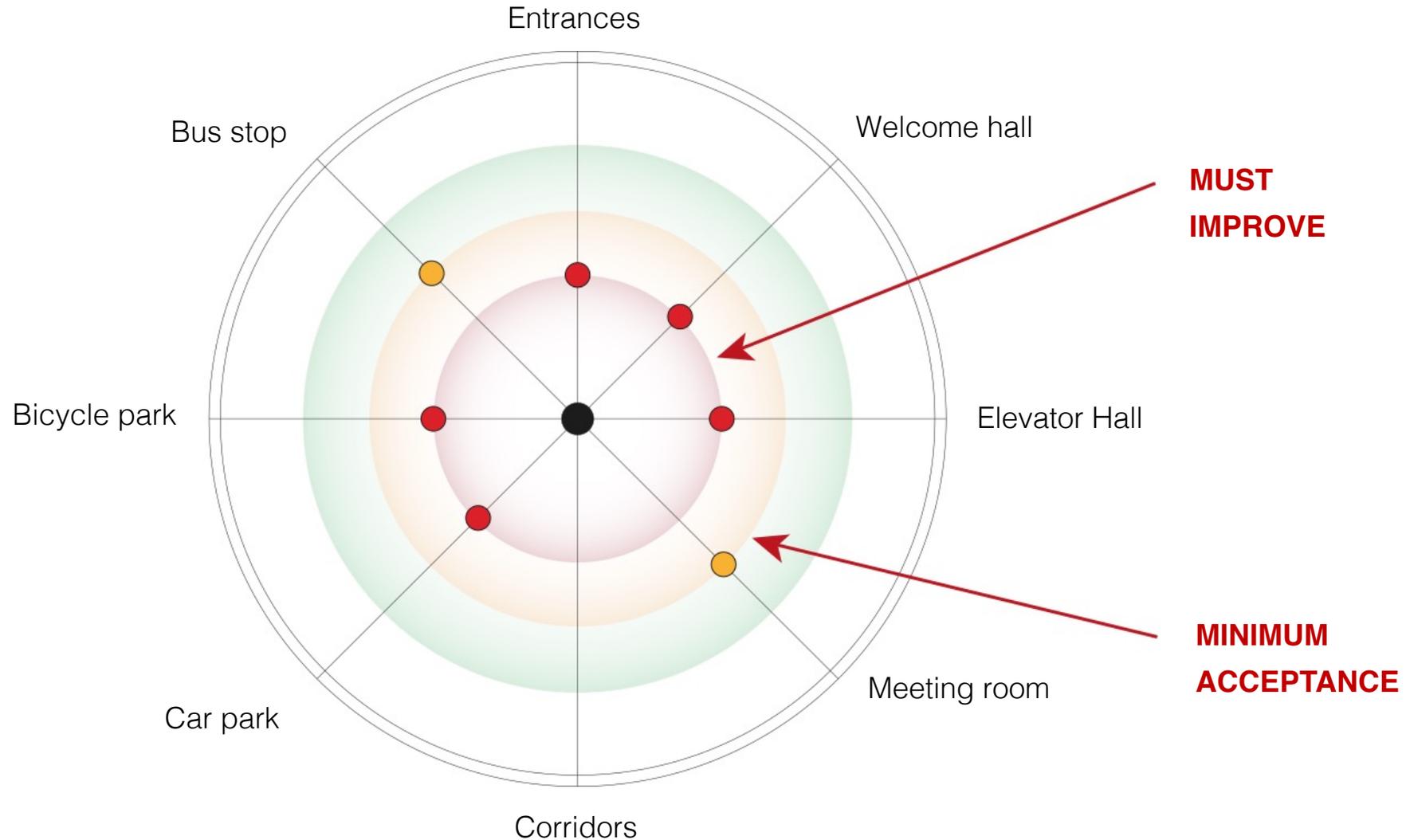


# SPINAPP screens

Login screen



# Survey summary for all chosen geographies



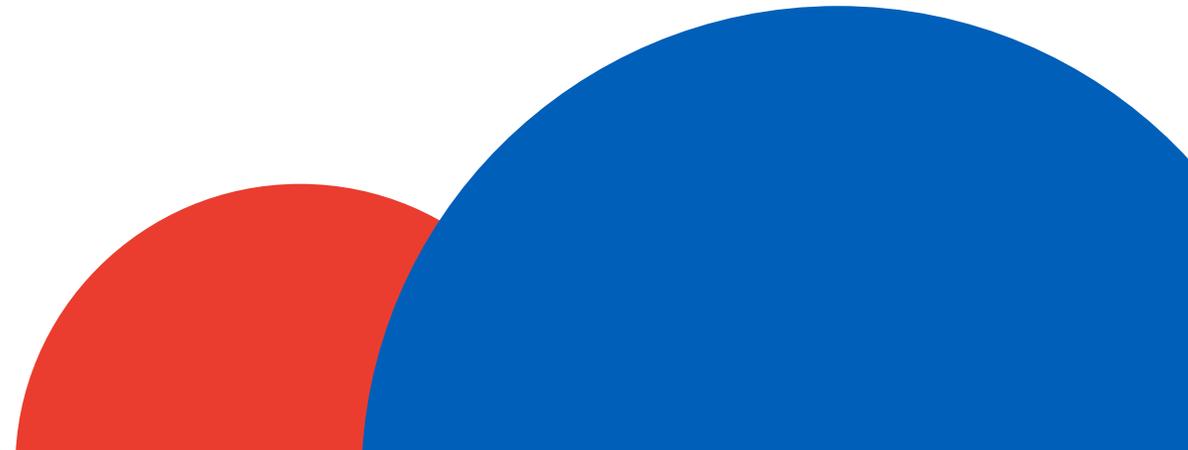
# Audiences - users

- Who can benefit ?
- urban authorities, investors, (private) owners, facility managers and operators real estate
- The tool can easily be adapted/extended/affected to other types of buildings
  - 1 - Entrance
  - 2 - Welcome hall
  - 3 - Elevator hall



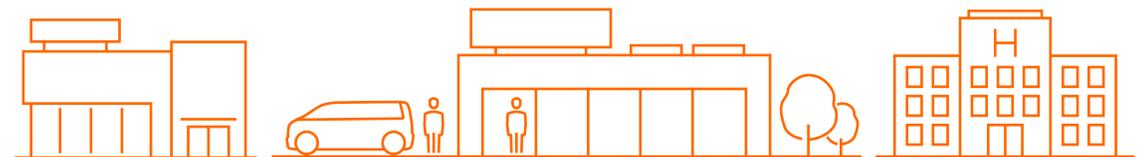
# SPIN APP - user focus

- Hospitals, museums, office, schools, airports, stations and more ...
  - address varying audiences differ in functional configuration
  - **share common basic** requirements and need for improvement of safety, security/convenience, energy, water & waste performance
- They **differ** amongst others in
  - accessibility under specific explicit and implicit conditions
  - complexity of infrastructure, equipment, operations/services
  - specific requirements for sound use: hygiene, convenience,...
  - integration in environment
  - purpose/reference in the city



# SPIN APP in conclusion

- Easy to use
  - Adaptable & flexible
- Transversal/interdepartmental approach
  - Comparative analysis
- Facts-based overview of health of building
  - Indication of interventions required
  - Recommendations





**Thank you!**

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