Inclusive Elements I APP

matrix

Co-funded by the European Union

Modernization of UI

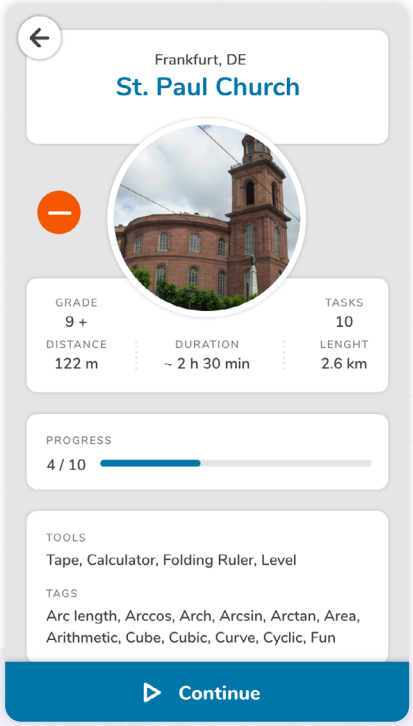
GENERAL BUT EFFECTIVE ADJUSTMENTS

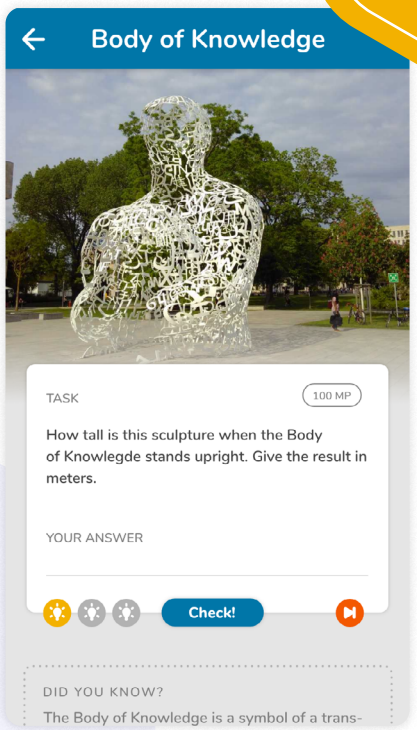
- **stronger contrasts**
  - ➔ clearer separation of areas / functionalities
- **size and positioning**
  - ➔ better accessibility / usability



USABILITY UPDATE

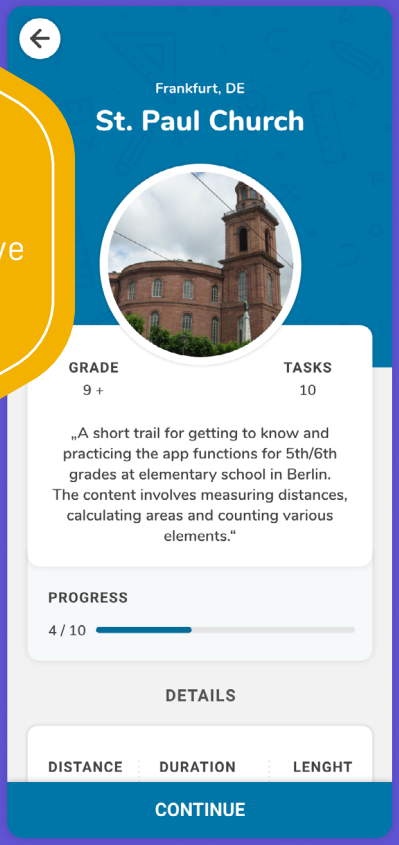
Modernization of UI

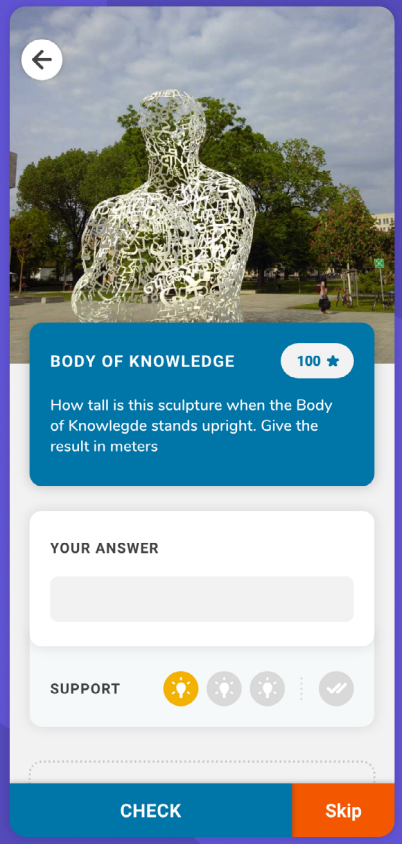




RESULT

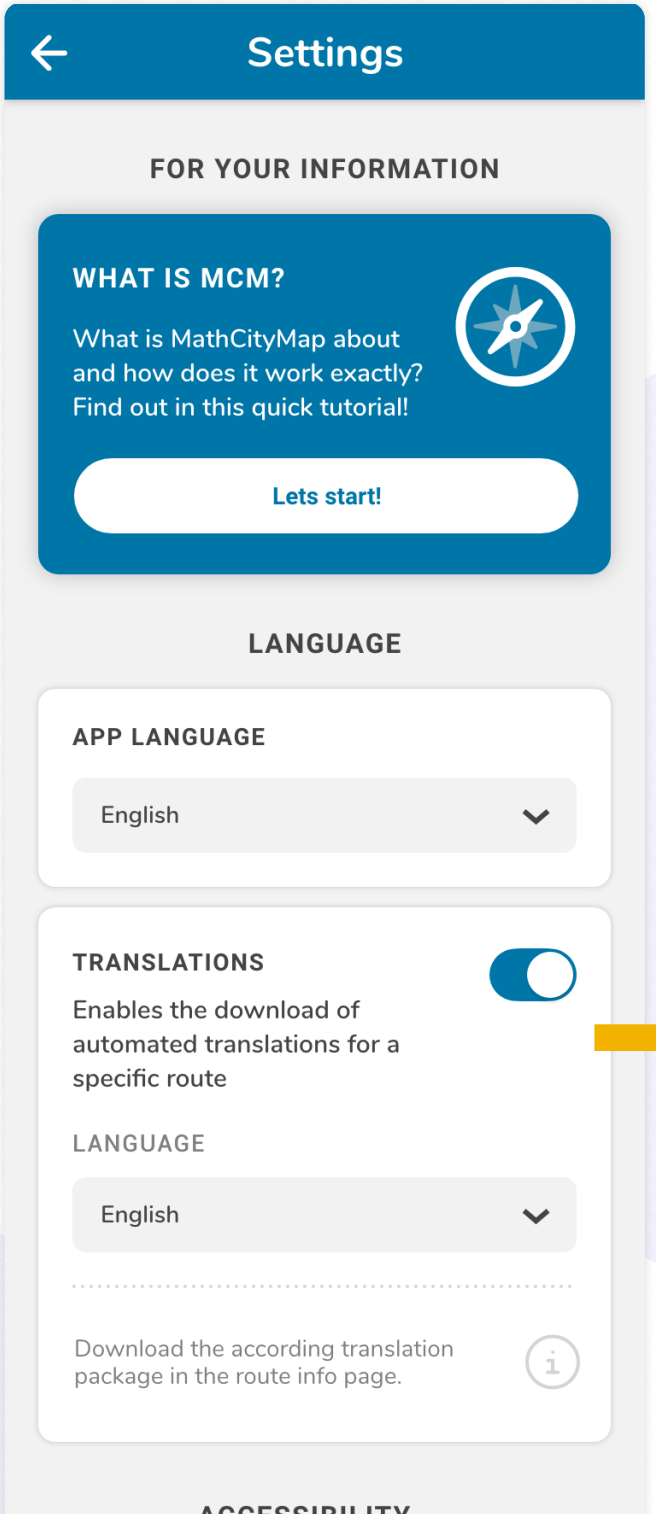
lighter & positive appearance





Automatic Task Translation

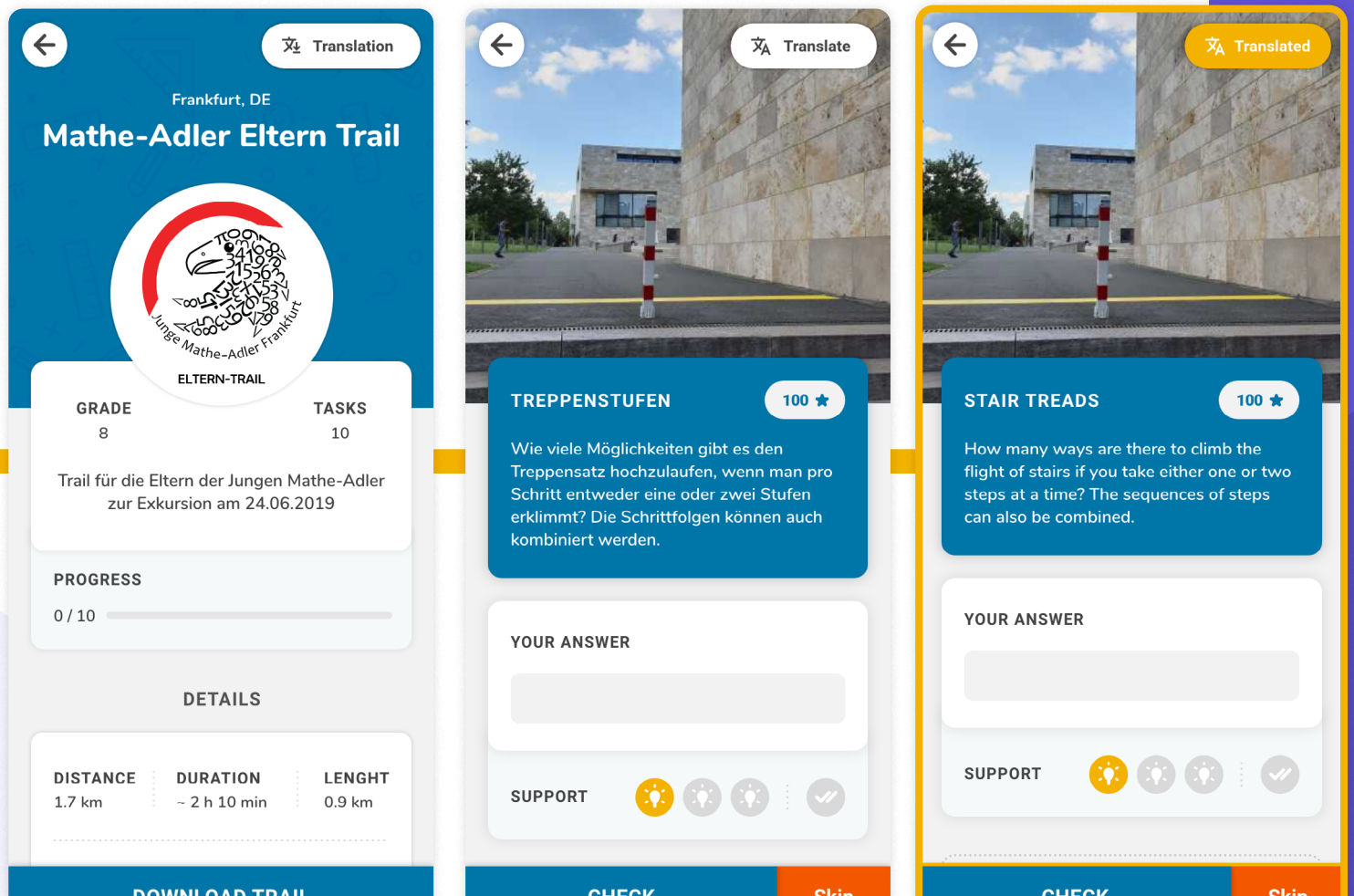
- Activation of function via **app settings**
- Switch to preferred language



NEW FEATURES

Automatic Task Translation

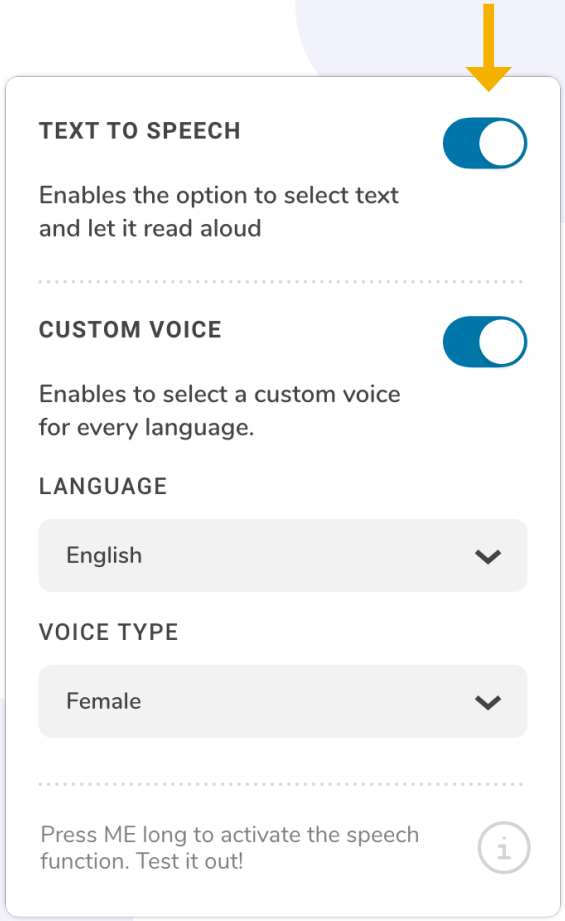
- Translations are retrieved when trail/tasks are downloaded
- **Toggled real-time** in Trail/Task view for main text content

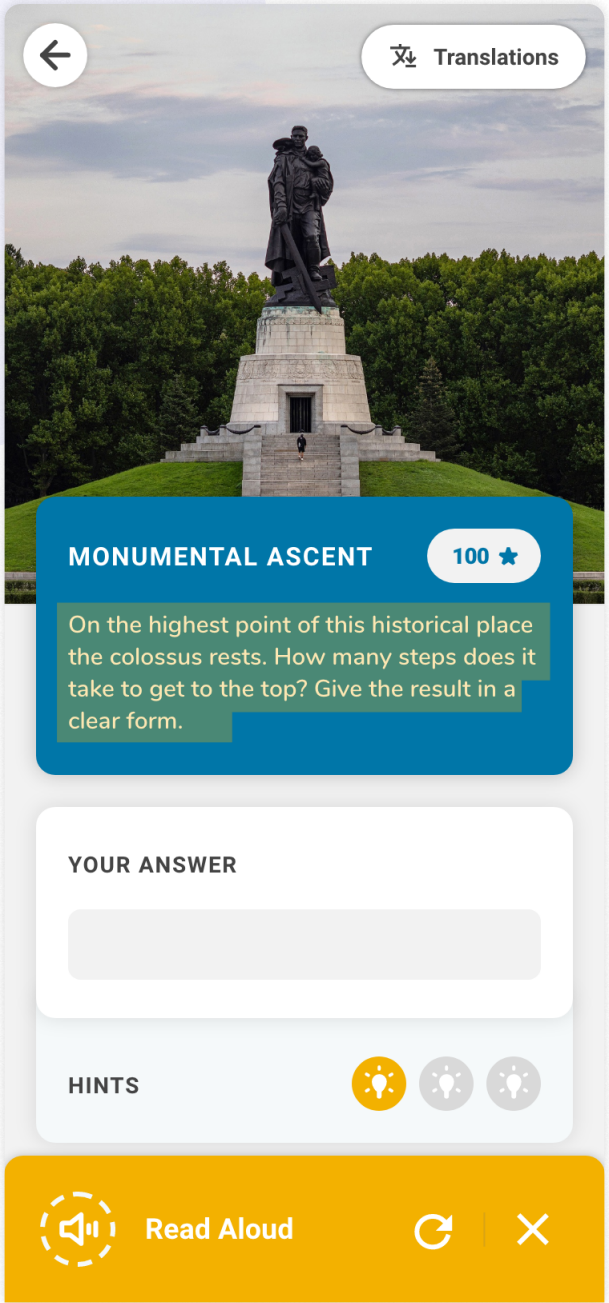


1. `Translation download`
2. `Translation activation`
3. `Translation activated`

Read-Aloud Function

- Activation of function via settings
  + Additional selection of voice type
- Selection of texts via long press
- Read aloud control





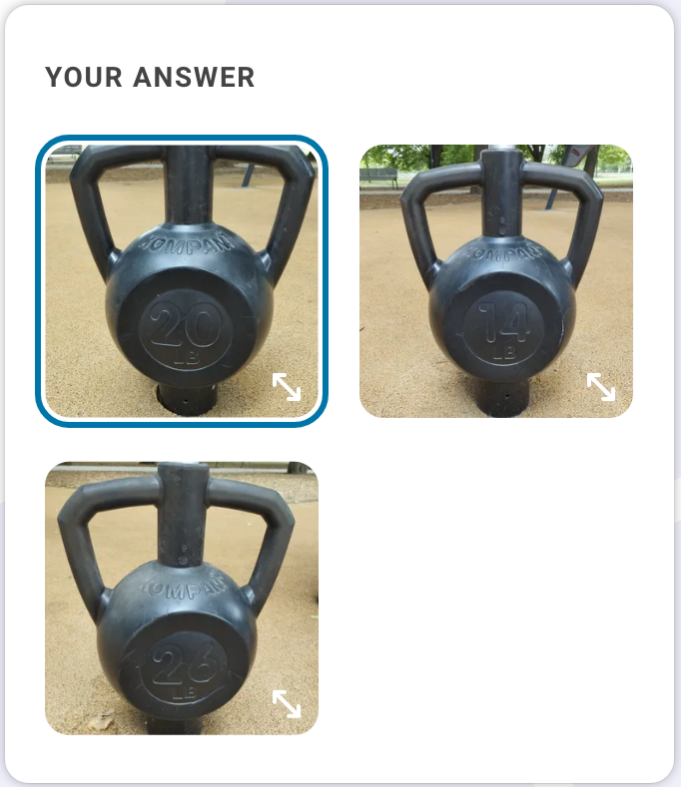
New Answer Formats

MULTIPLE CHOICE: IMAGE

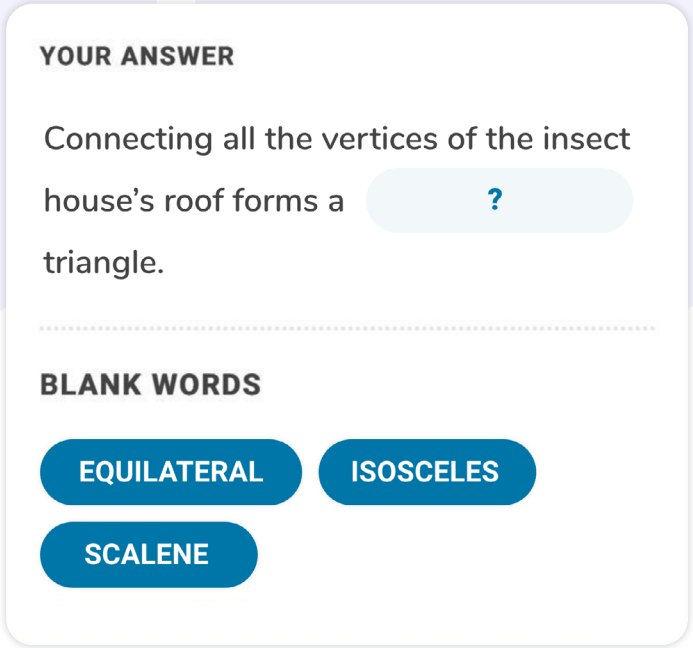
- Selection of image solution
- Image enlargement

EXAMPLE TASKS

03145051 / 34143900



New Answer Formats



FILL IN THE BLANKS: SELECTION

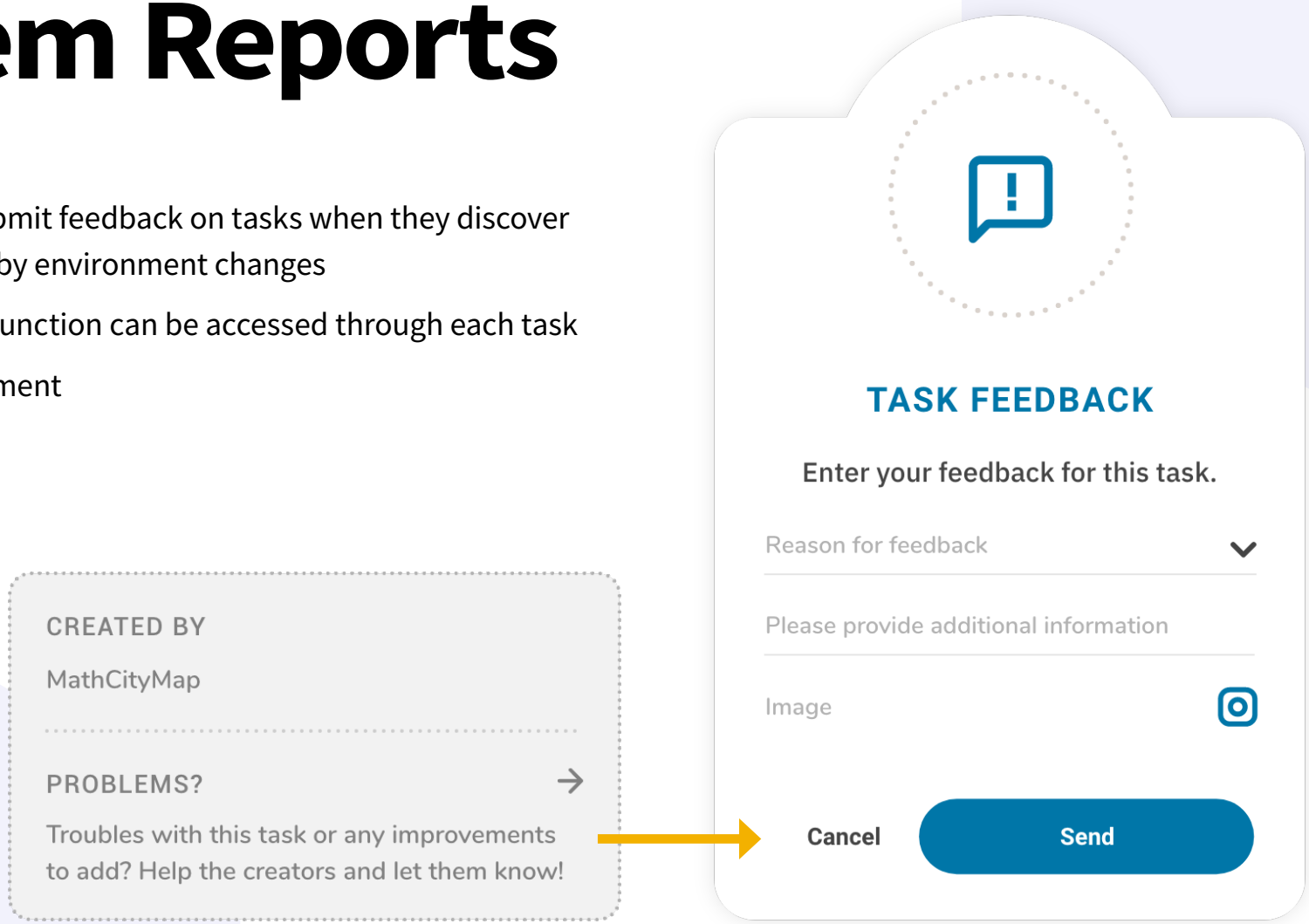
Selection of words from given options as opposed to having blanks which are filled through typing

EXAMPLE TASKS

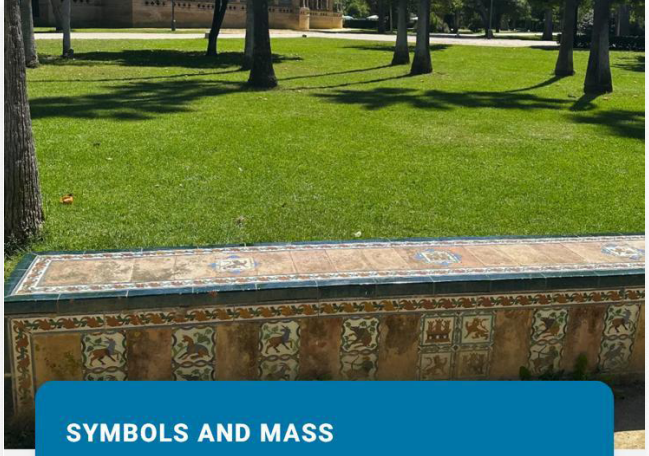
59113787 / 68145391

Problem Reports

- Students can now submit feedback on tasks when they discover problems caused f.e. by environment changes
- The Problem Report function can be accessed through each task
- Helpful image attachment



Task Groups



SYMBOLS AND MASS

This bench is richly decorated with various symbols and, because of the tiles, is also particularly heavy.

TASKS 1 / 2

Symbols 100 MP

Mass 100 MP

TOTAL SCORE 100 MP

Skip Task Group

INFO

By skipping the task group all unresolved tasks will be set as „skipped“ and you can move on to the next main task. But you can return to try the unresolved tasks anytime!



#3

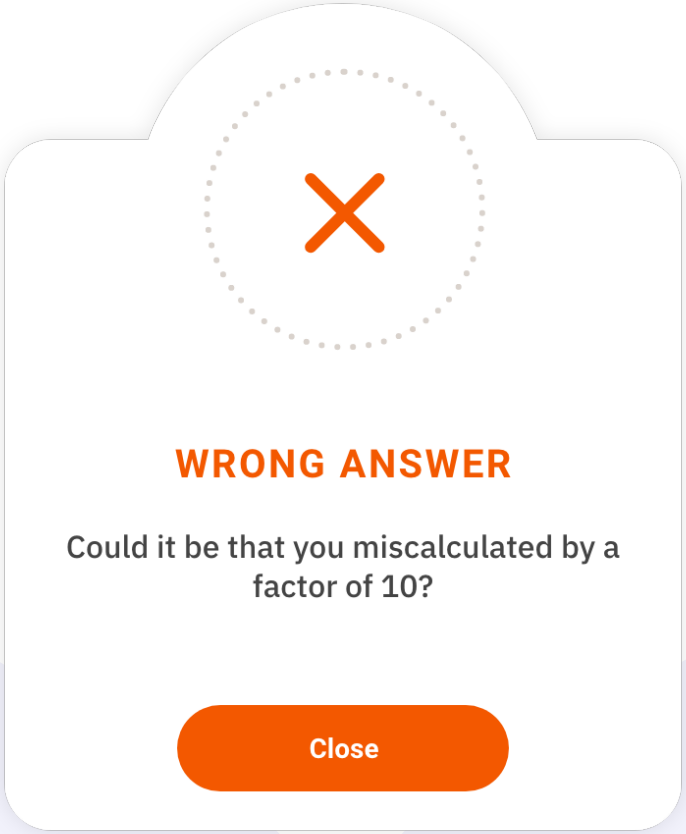
Symbols and Mass

Task Group: ✓ 1 / 2 ● 0 ● 0 ● 1 ● 0

- Ability to create a unified group of tasks at the same location
- Preventing the creation of multiple task markers on the same location featuring one object

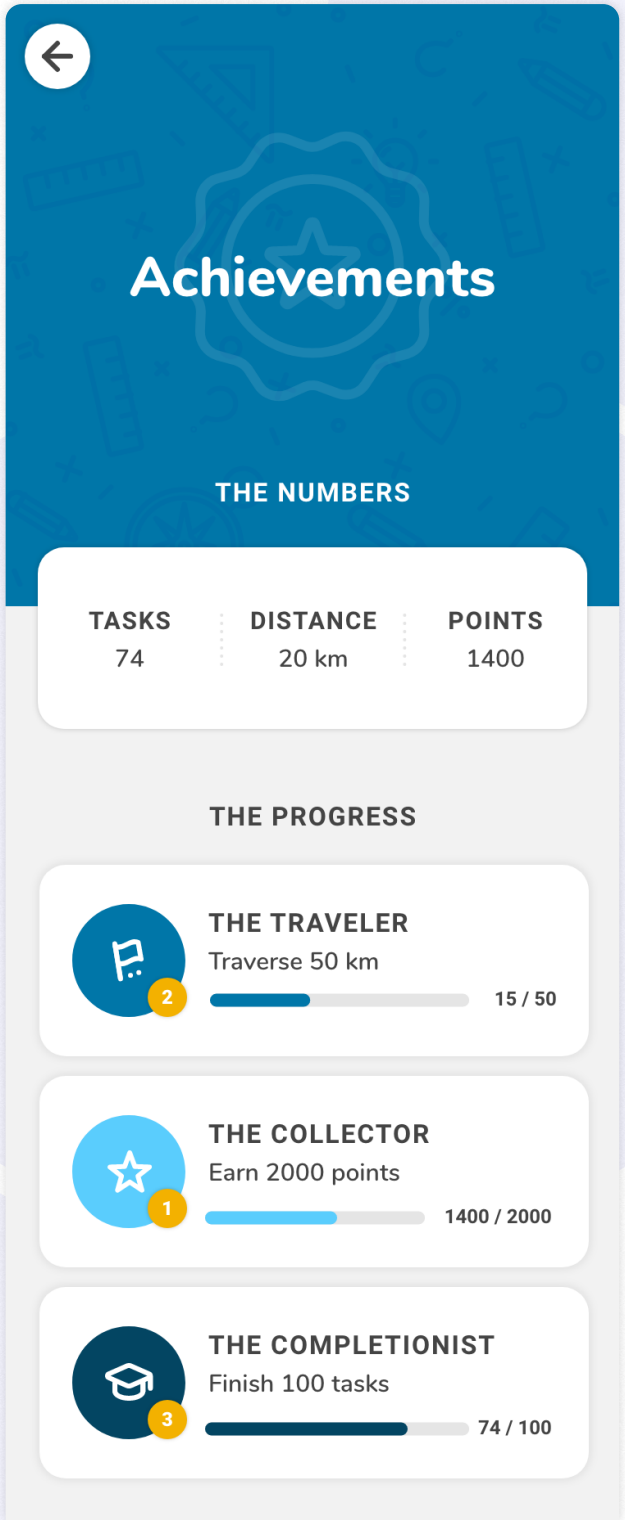
Adaptive Feedback

- App Feedback based on typical unit mistakes was implemented
- Feedback is given according to the answer a student types into the App



Achievements

- Motivating trackers for user progress
  - **Traveler** – km of trails traversed
  - **Collector** – earned points
  - **Completionist** – completed tasks
- Progress is opened via home dashboard & gets updated with every action



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matrix-project.eu

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Math Trails with an Inclusive Perspective on Students' Experiences ▪ 09/2023 – 08/2026

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