

**Scope:** The diagnostic app will be designed to evaluate young children's mathematical abilities, and will be administered by a teacher or parent who will log in with their email, Gmail, Facebook or Apple ID. In this first phase of development, the diagnostic app will be designed to perform diagnostic assessment only. (the conceptual second phase will include the addition of exercises focused on improving child's mathematical abilities). The diagnostic app will first ask the parent/teacher to sign in, then select or create a child to test and then begin the diagnostic. As soon as the test is opened, a timer will start. The child will need to answer the question within the specified time limit. After the diagnostic assessment, the result of the assessment will be saved in a database form, which will include all of the answers that were given, as well as if they were correct or incorrect and the time it took to provide the response.

**Functional Requirements:**

- The Parent/teacher has the provision of exporting the results of the database as a PDF report, summarizing those areas that the child needs to practice.
- The app should be localized into two languages, English and German, all text and translations will be provided.
- Every question of the diagnostic should be spoken with text-to-speech. If the child clicks on the question, it should be read again.
- No immediate feedback will be provided to the children, who will not receive any marks as right or wrong.
- The app should not use the virtual Google/Apple keyboard, but a fixed side panel containing the numbers from 0 to 9, a backspace and a return key (see wireframes).
- The timer function should also be used additionally to mark questions wrong in the database. For example, if a child takes longer than 10 seconds to solve a question but it is right, it is still marked wrong in the database. If the child takes longer than e.g. 40 seconds, the question is skipped and marked wrong.
- The diagnostic questions will have three different answer formats: a single answer, multiple answers, and sorting cards. The app will have 92 questions in total, with most questions having a single answer format. Most questions have similar formats, so the app should be possible with 5-10 screens.
- The final project should be delivered in an .APK and .IPA file format.
- All the test results should be stored in an online database that can be accessed by the administrator.
- A colorful, child-friendly design that includes the existing logo of the project.

**Before the project starts, please provide:**

- The categorisation of this project into your basic, standard or premium gig
- A clear and concise listing of costs up front, including any extras required that are not included in the package.
- An approximate timeline for the project completion. The freelancer will have to provide an estimated timeline based on the features to be added to the app.
- The freelancer has the option of offering extras if the project requires additional features to be added to the app.

There is a plan to eventually (phase 2 and 3) publish the app in the app store and play store, add payment features and include exercises (games) to help the children practice the things they got wrong. If the first phase runs successfully, the freelancer may be contracted to complete these phases of the project as well.

For clarifications or further information, please contact me on Fiverr.