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FUNCTIONAL OPPORTUNITIES OF THE APPLICATION FOR DEFINING ENGLISH LEVEL ACCORDING TO CEFR

The most popular type of actual controlling knowledge is computer testing. Computer testing has additional advantages in comparison with traditional blank testing:

- reduce testing time and estimation time
- instant feedback (giving result as soon as possible)
- reduce human resources
- to keep track of results of testing and analyze results of tests
- option of taking practice tests whenever you want
- no cheating
- distribute multiple versions of the exams and assignments
- it takes up less time and effort
- data can be stored on a single server
- eliminate human error in grading etc.

On account of these aspects tests become more effective, reduces testing time and costs (blank for testing etc.)

Different testing system, which provides a similar functional for creating of tests was analyzed and chosen the best approaches, moreover selected a required functional for building a test, aimed on define of English knowledge level.

Developed SPA application supports:

- registration and login by using own login and password
- separate roles and different scenarios depending on role are defined

As for coach, user with coach permissions can create a different type of English tests with different set of setting, to edit and remove created tests, to assign tests to others users and see results. Coach can see list of creating test, assignments history and personal assignment.

As for default user, user with default permissions can pass the assigning tests, to see own results, history of tests and list of assigning tests

- including different types of content in test, question can contain graphs, tables, video and audio
- creating different kind of questions such as multiple choice, single choice, checkbox, true/false etc.
- import questions from file
- create own estimation, marks, set up weight on question
- random and static order of questions
- create group of question and reused this group of question for any test

- different kind of limits for test (limit overall time on test, limit per question)
- limit quiz attempts
- external simple api, which generate link to pass the test to assigned user and link provides to see the results for the coach.

Application has convenient user interface, which based on user experience principles.

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ARCHITECTURE OF THE WEB APPLICATION FOR AIR PRICING

Successful booking process is needed in the actual information about an itinerary, including segments information, fare basis codes, fare breakdown, taxes/fees information. Information present to user during initial booking may be stale or incomplete, so web application should obtain complete itinerary after user have made his choice. The pricing process serving for this purpose.

Pricing is processed on the GDS (Global Distribution System). The GDS's have their own data schemas and data format, in which conversation between the web application and the GDS should be established. But the web application may have it own data schemas and formats, which can be different from the GDS ones. This means, the web application should have layer, which will transform the web application data format to the format which GDS understands and vice versa. Must GDS's have security protocols, which prevents an unauthorized access. The web application and the GDS should make a "handshake" process first – exchange with security tokens. Every request to the GDS costs a money to the airline, so it's reasonable to keep connection alive for some time, after it was established. Transformer layer is responsible for all these processes.

The data shown to the customer during initial search process and the data after pricing can be different. The changes can include fare price change, additional taxes or fees, fare change or booking class can be sold out already and the customer can't continue the flow. The pricing layer is responsible for the data check and appropriate warning population. This layer also should be responsible for the successful to fail pricings statistic gathering, which is needed for the web application to decide, if caches and databases should be populated with a fresh data to lower unsuccessful pricing rate, or the application can proceed with data "as is".

Pricing responses can be quite big, especially for the multipound flights – flights with 3 or more destinations cities, or flights for groups of the custom-