**תרגיל בית 3 חלק א׳ מחשוב ענן**

*מגישים:* **Salamandras’s group**

***שיר כהן ת.ז. 316216340***

***דוד זבונריוב ת.ז. 206440901***

***גל פרפל ת.ז. 206459562***

***עמית מלכה ת.ז. 324130483***

***יותם אהרון ת.ז. 208608448***

***אלדד שניאור ת.ז. 206696833***

*חלוקת התפקידים בצוות- איטרציה 2:*

***scrum master -מרכז את העבודה -*** *יותם אהרון.*

***,frontend developer – פיתוח החלק האחראי על הצגה ללקוח-*** *דויד זבונריוב.*

***,backend developer – פיתוח מסד הנתונים והעבודה מולו-*** *עמית מלכה.*

***product manager – ייצוג הלקוח בצוות (בהתאם לחשיבה העיצובית שבוצעה)-****שיר כהן.*

***UI – עיצוב הממשק -*** *אלדד שניאור.*

***QA – בדיקות התוכנה -*** *גל פרפל.*

***חלק ראשון: הגדרת SDP – software development plan – איטרציה 2***

*טבלה המתארת את שתי האיטרציות מתרגיל בית קודם:*

|  |  |
| --- | --- |
| **Iteration 1** | **Implementing the basic logic of the Project** |
| Task 1 | Scrum backlog. |
| Task 2 | Writing acceptance test. |
| Task 3 | Building a database. |
| Task 4 | Designing flask, collab and html architecture. |
| Task 5 | Home screen. |
| Task 6 | Manager screen. |
| Task 7 | Login screen. |
| Task 8 | Register screen. |
| Task 9 | Integration and refactoring. |
| Task 10 | My profile screen. |
| Task 11 | Edit question screen. |
| Task 12 | Leaderboard screen. |
| Task 13 | Play trivia screen. |
| Task 14 | Statistics screen for each game. |
| Task 15 | Integration and refactoring. |
| **Iteration 2** | **Building a more full-featured version** |
| Task 1 | Error 404 page. |
| Task 2 | Test the game- Acceptance and functional testing. |
| Task 3 | Statistic screen for user- Adding another interesting graph at the end of the game run. |
| Task 4 | Integration and refactoring. |
| Task 5 | Update design. |
| Task 6 | Update Play trivia screen. |
| Task 7 | Update my profile screen: Display all the sessions the user took part in (including his score ,Game correct answers and the date of the game in each session he participated in). |
| Task 8 | DB extension. |
| Task 9 | Saving all the sessions the user took part in (including his score ,Game correct answers and the date of the game in each session he participated in). |
| Task 10 | Integration and refactoring. |

**א. טבלה מפורטת עבור איטרציה 2.**

***ה****ערה:*

משימות שבוצעו בתרגיל בית 2 חלק ב׳ באיטרציה הראשונה:

* בניית מאגר משתמשים, הכולל שם משתמש, סיסמה.
* הוספת ממשק לאדמין לעדכון שאלות.
* הרחבת ה-DB .

|  |  |  |  |
| --- | --- | --- | --- |
| Executor | Task | Requirement | Iteration |
|  |  |  | Iteration 2 |
|  |  | Error 404 page. |  |
| UI and Frontend developer. | Designing the page according to the main design of the application. |  |  |
| Backend developer, Frontend developer. | Adding new routes according to the html pages received by the frontend developer. |  |  |
|  |  | Test the game- Acceptance and functional testing. |  |
| Scrum master,  Product manager, QA. | Checks where I can get an unsuccessful situation in the system. |  |  |
| Scrum master,  Product manager, QA. | Writing acceptance tests for all of the extensions in the system the successful and unsuccessful situation. |  |  |
|  |  | Statistic screen for user- Adding another interesting graph at the end of the game run. |  |
| UI ,Front developer, backend developer. | Create a linear graph which shows the player's progress according to all games.  Red- downward trend.  Green- rising trend. |  |  |
|  |  | Integration and refactoring. |  |
| Whole team . | Code merge . |  |  |
| QA. | Check for bugs. |  |  |
| Whole team. | Fix bugs . |  |  |
| Whole team. | Refactor the code . |  |  |
| QA. | Recheck. |  |  |
| Whole team . | Final overview. |  |  |
|  |  | Update design. |  |
| UI ,Front developer. | Add confetti on the statistic page after the game is over. |  |  |
| UI ,Front developer. | Update the position of the menu bar. |  |  |
| UI ,Front developer. | Design the Error page 404. |  |  |
|  |  | Update Play trivia screen. |  |
| Frontend developer. | Add pop-up with :  1) correct answer button after the user selects an incorrect answer  2) next question button to display the next question.  3) Display an error message for each question that the user answered incorrectly.  4) Display message for each question that the user answered correctly. |  |  |
| Frontend developer, UI | We reduced the size of the elements so that everything fits on one screen. |  |  |
|  |  | Update my profile screen. |  |
| Frontend developer,UI. | Adding match history section. |  |  |
| Frontend developer, UI. | Display all the sessions the user took part in (including his score in each session he participated in) |  |  |
| Frontend developer, UI. | Display for each session:  score ,game correct answers and the date of the game in each session. |  |  |
| Frontend developer, UI. | For each session display a “View Statistics“ button. |  |  |
| Frontend developer, UI. | Redirect the user to the statistic page of the chosen session after clicking on “View Statistic” button. |  |  |
|  |  | DB extension. |  |
|  | Add new table: “Games”.  Each key value in the “Games” table corresponds to the same key that exists in User.  And each game in the Games’s table contains game\_info that contains information about a particular session. |  |  |
|  |  | Saving all the sessions the user took part in (including his score in each session he participated in) |  |
| Backend developer. | Executing POST operation for the Games collection to the firebase DB(adding the new session and it’s info to the Games table). |  |  |
|  |  | Integration and refactoring. |  |
| Whole team . | Code merge . |  |  |
| QA. | Check for bugs. |  |  |
| Whole team. | Fix bugs . |  |  |
| Whole team. | Refactor the code. |  |  |
| QA. | Recheck. |  |  |
| Whole team . | Final overview. |  |  |

**Acceptance Test:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Requirement | Precondition | Expected Result | Description | Test ID | Section |
| Error 404 page. |  | The user redirect to the Error Page 404. | The user write route that does not exist in the location bar. | Error 404 page successful. | Error 404 page test. |
| Statistic screen for user- Adding another interesting graph at the end of the game run.  task:  Create a linear graph which shows the player's progress according to all games.  Red- downward trend.  Green- rising trend. | the user played a match of trivia and clicked on finish game. | Presents 3 graphs according to the game the user played:  1) a graph for the number of correct answers and incorrect answers.  2) a linear graph which shows the score and the question for each question in the game.  3)a linear graph which shows the player's progress according to all games.  Red- downward trend.  Green- rising trend. | the user being showed statistics about his previous game | Statistics-showing successfully. | Statistic screen test. |
| Update design, task:  Add confetti on the statistic page after the game is over. | the user played a match of trivia and clicked on finish game. | Confetti gif. | The user being shown confetti that announce the end of the game. | Confetti shown successfully | Statistic screen test. |
| Update Play trivia screen, task: Add pop-up with:  1) “Show correct answer” button after the user selects an incorrect answer | user logged in and choose to play trivia game and started the game. | Button will become red and pop up with message of "wrong answer" will appear and new button with “show correct answer” will appear. | The question is displayed to the user and the 4 possible options:  "Which of the following is not a cloud service model?"  Option1:  "Infrastructure as a Service (IaaS)"  Option2:  "Platform as a Service (PaaS)"  Option3:  "Software as a Service (SaaS)"  Option4:  "Device as a Service (DaaS)"  🡪 the user chose wrong option from the 4 possible answers : Option3:  "Software as a Service (SaaS)" | Popup show correct answer button successfully. | Trivia screen test. |
| Update Play trivia screen, task: Add pop-up with:  2) next question button to display the next question. | user start a game and answer a  question. | Pop up with "Next question" button. | User finish to answer a question and click "next question" button before the last question. | Popup show "Next question" button successfully. | Trivia screen test. |
| Update Play trivia screen, task: Add pop-up with:  4) Display message for each question that the user answered correctly. | user start a game and answer a  question. | Button will become green, 2 points will added to user's score and popup with message of "Good job! +2" will appear. | The question is displayed to the user and the 4 possible options:  "Which of the following is not a cloud service model?"  Option1:  "Infrastructure as a Service (IaaS)"  Option2:  "Platform as a Service (PaaS)"  Option3:  "Software as a Service (SaaS)"  Option4:  "Device as a Service (DaaS)"  🡪 the user chose the correct option from the 4 possible answers : Option4:  "Device as a Service (DaaS)" | Popup show "Good job! +2" successfully. | Trivia screen test. |
| Update Play trivia screen, task: Add pop-up with:  3) Display an error message for each question that the user answered incorrectly. | user start a game and answer a  question. | Button will become red and popup with message of "wrong answer" will appear and new button with show correct answer will appear. | The question is displayed to the user and the 4 possible options:  "Which of the following is not a cloud service model?"  Option1:  "Infrastructure as a Service (IaaS)"  Option2:  "Platform as a Service (PaaS)"  Option3:  "Software as a Service (SaaS)"  Option4:  "Device as a Service (DaaS)"  🡪 the user chose wrong option from the 4 possible answers : Option3:  "Software as a Service (SaaS)" | Popup show "wrong answer" successfully. | Trivia screen test. |
| Update my profile screen, task:  Display all the sessions the user took part in (including his score in each session he participated in)  task:  Display for each session:  score ,game correct answers and the date of the game in each session. | The user logged in to the system. | All the sessions shown to the user (including  score ,game correct answers and the date of the game for each session). | The user is enter to the combo box on top right and clicks on the "My profile" button and scroll down to the “Match History” section. | Display all the sessions successfully. | my profile screen test. |
| Update my profile screen, task:  For each session display a “View Statistics“ button.  task:  Redirect the user to the statistic page of the chosen session after clicking on “View Statistic” button. | The user logged in to the system.  The user played trivia game. | moving to player statistics page display the 3 graphs:  1) a graph for the number of correct answers and incorrect answers.  2) a linear graph which shows the score and the question for each question in the game.  3)a linear graph which shows the player's progress according to all games.  Red- downward trend.  Green- rising trend. | The user is enter to the combo box on top right and clicks on the "My profile" button and scroll down to the “Match History” section and clicks on the “View Statistics” button. | Display session‘s “view statistics” successfully. | my profile screen test. |
| Saving all the sessions the user took part in (including his score in each session he participated in)  Executing POST operation for the Games collection to the firebase DB(adding the new session and it’s info to the Games table). | The user logged in to the system.  The user played trivia game. | The user is shown the last game he played in the “Match History” section. | The user play trivia game🡪the user finish the game 🡪 The user enter to the combo box on top right and clicks on the "My profile" button and scroll down to the “Match History” section. | Saving all the sessions the user successfully. | my profile screen test. |
| DB extension.  Add new table: “Games”.  Each key value in the “Games” table corresponds to the same key that exists in User.  And each game in the Games’s table contains game\_info that contains information about a particular session. |  |  |  | The user enter to the combo box on top right and clicks on the "My profile" button and scroll down to the “Match History” section | DB extension  successfully |  |

**פרטי חשבון גוגל:**

העלנו את הקבצים לדרייב ומשם אנחנו טוענים אותם לקולאב לכן לפני הכניסה למחברת בקולאב יש להתחבר לחשבון הגוגל הבא:

**שם משתמש:** ThinkCloudComputing@gmail.com

**סיסמא:** TccInc123

**הקישור למחברת בקולאב:**

<https://colab.research.google.com/drive/13bYT4Qujn9O0EutgtdAiZ4nl6-GyhH68?usp=sharing>

**קישור ל-GIT הקבצים נמצאים בברנץ' TCCv2:**

<https://github.com/cohensh96/CloudComputing.git>