Project Description

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**Basic Features:**

* The ability to create a new game, open an existing game, edit the game, and save the game persistently on an Android device (either using a SQLite DB or a file is fine).
* The way to play the game. We have a single app that both allows editing and playing of games.
* The app will start editor mode with a list view showing current existing adventure-created, and users can choose to either create a new adventure or resume from previous adventures.
* The app offers the ability to go to different pages created in editor mode, in each page, shape, page background are shown. Page can be added or edited with features including background and name. Shape can be added by choosing a source image, and can also be edited with features including name, image, text size, text color which can be illustrated simultaneously when sliding the seek bar of RGB, shapes can also be added or edited with scripts which include basic grammar following ‘on trigger (shape if trigger=drop) action object’. Users can append as much ‘action object’ combination as wanted in a same ‘on trigger (shape)’ combination.
* Among editing adventures, datas and data structures are saved and pass through singleton storing a class called Docs. Once the adventure is finished with editing, users can save docs including the edited adventures into database, which can be chosen in either play mode for play or edit mode for refinement.
* The way to create, name, delete, and see pages. Newly created pages should automatically be assigned names. The first page created should always get the special name "page1". Subsequent pages should get the names "page2", "page3", etc. There should be visual feedback of the name of the currently displayed page. There should be a way to edit the name of a page (except page1). There should be a way to delete the current page (except page1), which deletes the shapes on that page (though not the resources they refer to).
* There should be a way to add, name, see, edit, and delete shapes in the current page. Newly created shapes should automatically be assigned globally unique names "shape1", "shape2", and so on. There should be an "inspector" which displays and edits the state of the currently selected shape. The state of the selected shape includes: its geometry (4 ints), name, movable, visible, image-name, text, and associated script.
* The application can be preloaded with images and sounds that a game designer can use to develop their own adventure game.
* The application has multiple pulldown menus allowing the user to choose a script by specifying the triggers, actions and targets.

**Extensions:**

* Perform error checking immediately as the user enters in information to ensure that there are no errors, such as references to pages that don’t exist, objects that do not exist, duplicate names, etc.
* The shapes in the editor can be copied within the same page, the canvas could be cleared readily.
* The user is able to draw self-defined shapes. The self-defined shape could be created with various colors, strokes, erase/clear current canvas, and also preview previous created shapes.
* During the game, the shapes can shrink into possessions’ area. Shapes could automatically shrink and/or position themselves neatly when dragged to the possessions area.
* Allow specification of background images for pages. The page could be given the ability to fill its frame with an image. Users can choose specific background images in editor mode and game mode.
* Provide rich support for rich text (i.e., bold, italic, colors, and changing font and font size) within a text item.
* We have provided users with a timer to indicate how much time left to finish the game. Users should finish the game within a limited amount of time. Otherwise, users lose the game.

**Contribution:**

Yuqin Dai: contributed to building the editor, including the definition of Page class, managing the storage and change of the current singleton such as adding, editing and deleting new pages or shapes in Docs.java, implementation of error checking, implementation of features like choosing a specific page.

Yuwei Fu: contributed to the play mode of the game, including the design and implementation of gameview, the implementation of possession area, displaying the pages and shapes during the game and perform their actions when triggered. Enable shapes to shrink into possession and lined up.

Yitao Gao:contributed to loading/deleting adventure, resetting adventure, creating new adventure editor, save adventure into database, constructed singleton, add/edit page, add/edit shape, setup dialog layout and activities for edit/add shape, page. Created edit script dialog and activity, defined shape class, configured edit main activity, and partially devoted to defining Docs class.

Liu Jiang: contributed to playing the game and handling the database (creation, reading, writing and resetting), including the design of main activity, game activity and connection with game view. Added support for texts and functionality for game timer.

Tong Liu: Contributed to the basic layout of editor. And define basic functionality to the game editor. Contributed to the drawable view of self-created shape. Save the Also provide a feature for editor to copy/paste the shape within the page. Make some contribution to the write to database.