Product Name: Dunes
Team Name: Dudes
12/3/17

Working Prototype Known Problems Report

**Known bugs**

1. If you load a file not generated by Dunes, you might run into unexpected problems, such as crashing or incorrect block data
   ● You have a file that has data not generated by dunes, ex. user edited the .dunes file
   ● Can be fixed by stronger parsing

2. Dragging to the top sometimes doesn't work
   ● Input: You have 2 blocks, could be difficult to drag the bottom one over the top one
   ● Located in blockarea.cpp → blockarea::dropEvent()
   ● Fix: Use hot key to swap module locations

3. Deleting a module that is indented → subsequent blocks being added breaks the indention for it and the previous block
   ● Input: 3 blocks indented to max, delete middle one, indentation is broken when another block is added
   ● Located in blockarea::keyPressedInModule()
   ● Possible fix: Whenever a block is deleted, we change the column for all subsequent blocks

4. Using download module with the dropdown options POST → Instead just acts as the None options, and does a GET call to the entry in the text box.
   ● Input: Drag a download block, use the POST option with a url. Then add a select block, get text block and an add column block. Then hit run code, after setting up the npm and node paths.  You will see Dunes simply does a get request and writes the selected text to a CSV.
   ● Located in downloadmodule.cpp
   ● Possible fix: Implement the POST option. It's currently unimplemented. We would then write a function in our javascript to actually do a POST action.

5. On windows devices, the blocks sometimes take on a rectangular shape instead of a circular one.
   ● Input: Add a block that doesn't have options into the block area.
   ● Located in basemodule.cpp
   ● Possible fix: Increase the padding around modules to allow there to be enough space. Alternatively, use the rectangular shape by default instead.

6. Moving blocks within the block area works, but the indicator goes away if you hover over a block's configuration options.
  ● Input: Add multiple blocks into the block area. Drag the block and hover over another block's configuration options, the indicator goes away.
  ● Located in blockarea.cpp
  ● Possible fix: Look into QT's dragging inheritance hierarchy, because we suspect there's an issue with nested widgets.

7. All blocks can be indented, however, only certain blocks should allow their children to be indentable.
  ● Input: Add multiple blocks into the block area. Hitting tab on all of them allows them to be indented. Only scope, if, while, and foreach should allow their children to be indentable.
  ● Located in blockarea.cpp
  ● Possible fix: Add an isIndentable property to all blocks, that stems off it's parent block

**Suggested Test Cases / User Stories**

Sprint 2, User Story 2: As a user, I want to be able to export generated code so that I can use the web scraper I've created elsewhere
  Scenario:
  1) Open app
  2) Drag some modules into block area
  3) Hit Generate
  4) Set destination for the CSV and code generated
  5) Open javascript file created

Sprint 3, User Story 2: As a user, I want there to be the ability to save and load the scripts so that I can continue working on them later
  Scenario:
  1) Open app
  2) Add any number of blocks to the block area.
  3) Click save.
  4) Exit app
  5) Open app
  6) Click load and load the script you saved.

Sprint 4, User Story 1: As a user, I would like an easy to install package
  Scenario:
    For Mac:
      1) Go to https://github.com/Colecf/Dunes
      2) Download the Dunes.app folder under Dunes_Release_Mac
      3) Run the Dunes.app application
    For Linux:

1) Go to https://github.com/Colecf/Dunes
2) Download Dunes_Release_Linux folder
3) Run the AppRun file

Sprint 4, User Story 2: As a user, I would like to be able to drag blocks and for there to be an indicator

Scenario:
1) Open app
2) Drag 1 block into blockarea
3) Indicator will appear when 2nd block is dragged into blockarea
4) If there are multiple blocks in blockarea, indicator will appear any block is dragged

Sprint 4, User Story 5: As a user, I want the ability to delete blocks

Scenario:
1) Open app
2) Add blocks to block area
3) Select a block
4) Press delete/backspace