Product backlog: ranked

1. Web application with backend written in Java
   1. Server side mush handle all photo manipulation, collage generation and session management
2. Main web page has a topic input box, collage shape input box, collage options, save to history button, and build collage button.
   1. Collage options:
      1. Size, width in pixel of final collage (width, height)
      2. Apply 3 filters, black/white, grey scale, sepia
      3. Photo borders: on/off – no requirement for border pixels
      4. Photo rotation: on/off – no requirement for rotation
   2. Input box: should have place holder text
   3. No requirement for the input length
   4. Page color and layout should be attractive
   5. Letter can be in lower case
   6. Collage background: only show letters
   7. No requirement for the stroke of letters as collage
3. When the Build Collage button is pressed, a collage shall be generated that fills the shape of the letters specified in the shape input with the photos that correspond to the topic input
   1. Time requirement for building the collage: no requirement
   2. Letters should be big and thick to allow a visually appealing look
   3. No white space in the letters
   4. Photo cut off at the edge of the letter outline
4. When the Build Collage button is pressed an animated busy/thinking symbol should be displayed until the collage is generated and returned
   1. Page should not reload between each initial or subsequent collage building request
   2. The animated symbol should show accurately during the collage building time
   3. The symbol should look like a busy symbol
5. Collage must be made up of at least 30 images
   1. Error message: when there are no 30 images
   2. Comes from google image search
6. Access to the application should be controlled by requiring a username and password
   1. Maintain individual collage history
   2. No requirement for length, format of username and password
   3. No requirement for UI, logout button, implementation method…
   4. Should be secured use encrypted transport HTTPS
7. There should be a collage history gallery to display the previously saved collages
   1. Collage history gallery, click the collage->show in main collage space
   2. Current collage should save to history if clicked saved collage button
   3. Not saved unless you click the save button
   4. No UI requirement for the collage history gallery
   5. Can delete collage in history
   6. No requirement for the order of collages in the history gallery
8. When a collage is displayed there should be an export button that allows for download of the collage
   1. Export: png or pdf, specified by the user