RADIS_requirements_1_04_01_2012

<u>Functional Requirements</u>
Last Modified: 1 April 2012

- The user should be able to create a new patient object in a database.
- The user should be able to input patient history.
- The user should be able to input an image.
- The user should be able to select what type of image is to be processed.
- The system should return a result from the image processing.
- The result should be in the form: "normal or abnormal"
- The user should have an option to apply a specified amount of contrast on the original image and display the output. (without diagnosis)
- The user should have an option to output an edge detected image. (without diagnosis)
- The system should interpret the image result and patient history to come up with a likely diagnosis.
- The application should produce a report.
  - The report should include all previous history.
  - The report should include the original image
  - The report should include the processed image.
  - The result should include the result of the processed image.
  - The report should include a diagnosis.
  - The report should include a list of alternate diagnoses.
    - The list of alternative diagnoses should be ordered by probability of correctness.
- All diagnoses should be presented with justification.
- The justification should list matching symptoms and matching image indications.