App Development Report:

1. Main Page
   1. Navigation Drawer
   2. Toolbar
2. Scores
   1. Subjects
   2. Assignments
      1. Assignments Adder
      2. Assignments Editor
   3. Categories
   4. Alert Dialog
   5. Custom List View
   6. Working with Images
3. GPA Table

Custom List View

1. Setting
2. Database (95%)
3. Formulas (50%)

<https://www.androidauthority.com/best-to-do-list-apps-for-android-677569/>

Databases:

Tables:

1. Year Table
   1. ID: To identify what year it is.
   2. Year Name: Tells us the name of the year
2. Semester Table
   1. ID: To identify what semester it is.
   2. Year ID: joined with the year table, that recognize what data is required.
   3. Semester Name: Tells us the name of the semester.
3. Subjects
   1. ID: To identify the subject
   2. Year ID: joined with the year table, that recognize what semesters to show.
   3. Semester ID: To identify what subjects are in each semester.
   4. Subject Name: Tells us the name of the subject
   5. Subject Grade Image: Tells us the average grade of the image
4. Assignments
   1. ID: To identify the assignment
   2. Year ID: joined with the year table, that recognize what semesters to show.
   3. Semester ID: To identify what subjects are in each semester.
   4. Subject ID: This column is joined with the Subjects Table and is there to identify assignments for a subject.
   5. Assignment Name: Tells us the name of the subject
   6. Score Received: Tells us the score of the assignment ID
   7. Percent Weightage: Tells us how much this assignment is worth
   8. Date: Records the date of the assignment
   9. Category Image: Shows the Visual Representation of percentage.
   10. Grade Image: Shows the Visual Representation of the grade.
   11. ~~Semester: Tells us what semester this assignment was entered~~
   12. ~~Grade: tells us what grade this assignment was entered~~
5. Categories
   1. ID: To identify the Category
   2. Year ID: joined with the year table, that recognize what semesters to show.
   3. Semester ID: To identify what subjects are in each semester.
   4. Subject ID: This column is joined with the Subjects Table and is there to identify assignments for a subject.
   5. Category Name: tells us the category name
   6. Weightage: Tells us the percent weightage of that category
   7. Category Image: Gives a visual representation of the image
6. Conversion Table
   1. ID: To identify the Conversion
   2. Category Name: To identify what goa scale to use.
   3. Letter Grade: Tells us the letter grade for that conversion
   4. Percentage: tells us the percent range of the conversion
   5. GPA: tells us the gpa of the that conversion

Formulas:

1. Grade for Subject – Half Done
   1. gradeRecieved (for that weightage) = Score\*PercentWeightage\*100
   2. percentWeightageCount = Count of How many Assignments are of that weightage
   3. averageScorePW = ((Sum of all gradeRecieved) / ((percentWeightageCount)\*100) / (Percent Weightage of Assignment)
   4. subjectFinalScore = Sum of all averageScorePW
2. Letter Grade for Subject – Done
   1. subjectLetterGrade = Look up in the conversion table to see what letter grade subjectFinalScore is using inequalities
3. GPA for the Subject – Done
   1. subjectGPA = Look up in the conversion table to see the gpa score for subjectLetterGrade
4. Grade for Semester – Done
   1. semesterAverageP = Sum of all scores for all subjects / number of subjects
5. Letter Grade for Semester – Done
   1. semesterAverageL = Look up in the conversion table to see what letter grade semesterAverageP is, using inequalities
6. GPA for Semester – Done
   1. semesterAverageGPA = sum of all subjectGPA / number of subject
7. Grade for Year – Left to do
   1. yearAverageP = sum of all semesterAverageP for that year / number of semesters that year
8. Letter grade for Year – Left to do
   1. yearAverageL = Look up in the conversion table to see what letter grade yearAverageP is, using inequalities
9. GPA for that year – Left to do
   1. yearAverageGPA = sum of all semesterAverageGPA for that year / number of semesters that year
10. Prediction Model – Left to do
    1. scoreRequiredPW = (desiredGrade - averageScorePW (without including assignments with givenPercentWeightage)) / givenPercentWeightage
    2. scoreRequired = scoreRequiredPW \* (percentWeightageCount(for the givenPercentWeightage) + 1) - (sum all grades received(for the givenPercentWeightage)