Church Database
project definition documentation

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Background
The AME Zion Church has many reports (dozens of types), yet the data needed to generate them all can be gathered from a few tables. The reporting system for the denomination is lagging far behind current information/technology standards, and the skills developed from this course could easily assist the organization become efficient in reporting practices. My goal is to eventually provide a current alternative to data management for the denomination, using my local church as an example. This project is one of a few steps toward that goal.

Mission
Create a church database of which reports may be created through various views, eliminating the need to hard code individual reports for every transaction, ministry, or responsible party.

Mission Objectives
- Compile an exhaustive list all data needed to generate current reports
- Develop models by creating tables
- Envision relationships, identify and minimize/eliminate redundancies
- Develop a simple case for a weekly finance report
- Figure out what is needed to produce a receipts
- Transfer paper model to flat file database, test mock data
- Create PostgreSQL database and import flat file schema
- Import data into tables with SQL
- Test by creating views in PostgreSQL
- Satisfaction
- Evaluate and Refine Objectives
- Repeat

Constraints
- The actual database must function within PostgreSQL utilizing structured query language.
- .csv files/ flat database would suffice for very minimal reporting (only after an actual database if functional).

Necessary Features and Views
View: Membership Directory
- Concatenate and join data to create a simple membership directory

View: Ministry Directory
- Concatenate and join data to create a simple membership directory

View: Church Demographics
- generate a brief information report on the church based on data contained in all tables.

View: Weekly Financial Report
- Create records for every transaction for the prior week (Monday – Sunday[current day])
- Must include verification and link to responsible parties (foreign keys)

- - All transactions must be approved by Wednesday following the initial journal entries, but verification is encouraged the same day of recording and verification.
- - All transactions must be verified before approved and should be verified no later than 24 hours after recording.
- - All transactions for the week will be recorded no later than Sunday following service. The total will include all income and expenses between Monday and Current Sunday following benediction of the last service of the day during regular Steward board meetings.

Known and Assumed Business Rules

- 1 pastor per charge (church).
- 3 parties must record, verify and approve weekly finance statements. (member_id's count as digital signature, include them as foreign keys in appropriate tables.)
- Member and Ministry directories must include at least one contact phone number and an @amez email address
- All transactions must be recorded by the steward secretary or designee before they are verified and approved.
- All transactions must be verified by the steward chairman or designee before they are approved.
- All transactions must be approved by the pastor before being included in any official report.