



STEVENS
INSTITUTE *of* TECHNOLOGY
THE INNOVATION UNIVERSITY®

SSW-555: Agile Methods for Software Development

Introduction To Course Project



GEDCOM Team Project Overview

- 2-4 people form a team to practice extreme programming and scrum methods
- Implement an anomaly detection program on GEDCOM data files
- GEDCOM
 - Genealogy (family history) data
 - Developed by the Church of Jesus Christ of Latter-day Saints
 - Line oriented, ascii files
 - <https://en.wikipedia.org/wiki/GEDCOM>





Timeline

- Week1: hand code GEDCOM data (individual)
- Week2: read/parse GEDCOM data (individual)
- Week3: Sprint Planning (team)
- Weeks 4-5 – Sprint 1 (team)
- Weeks 6-7 – Sprint 2 (team)
- Weeks 8-9 – Sprint 3 (team)
- Weeks 10-11 – Sprint 4 (team)



Getting Started: Documents

- ProjectOverview.pdf
 - Project overview
 - Intro to GEDCOM
 - Subset of GEDCOM tags
- ProjectExpectations.pdf
 - What's expected of each student and team
- TeamXXReport.xlsx
 - User stories
 - Project tracking
- HowToUseProjectReport.pdf
 - Detailed Instructions



GEDCOM File (1)

- Two major entities: individuals and families
 - Individual
 - Unique individual ID
 - Name
 - Sex/Gender
 - Birth date
 - Death date
 - Unique Family ID where the individual is a child
 - Unique Family ID where the individual is a spouse
 - Family
 - Unique family ID
 - Unique individual ID of husband
 - Unique individual ID of wife
 - Unique individual ID of each child in the family
 - Marriage date
 - Divorce date, if appropriate



GEDCOM File (2)

GEDCOM is a line-oriented text file format where each line has three parts separated by blank space:

1. **level number** (0, 1, or 2)
2. **tag** (a string of 3 or 4 characters)
3. **arguments** (an optional character string)

<level_number> <tag> <arguments>

```
0 I27 INDI
1 NAME Mark /Ardis/
1 SEX M
1 BIRT
2 DATE 7 APR 1949
1 FAMC F32
0 NOTE end of individual Mark Ardis
```

INDI: individual
FAMC: child of a family
NOTE: it is comment

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Project Expectation

- Working as teams with discipline and collaboration
 - Each member of the team should contribute
 - Team contribution recorded by GitHub
- Each member take 2 user stories each sprint.
 - Major refactoring/infrastructure development counts towards as 1 user story
- Each student receives 2 grades for sprints
 - Team grade 0-10
 - Individual grade 0-10
 - Final grade for sprint is the product



TeamXXReport.xlsx

Story ID	Story Name	Story Description
US01	Dates before current date	Dates (birth, marriage, divorce, death) should not be after the current date
US02	Birth before marriage	Birth should occur before marriage of an individual
US03	Birth before death	Birth should occur before death of an individual
US04	Marriage before divorce	Marriage should occur before divorce of spouses, and divorce can only occur after marriage
US05	Marriage before death	Marriage should occur before death of either spouse
US06	Divorce before death	Divorce can only occur before death of both spouses
US07	Less than 150 years old	Death should be less than 150 years after birth for dead people, and current date should be less than 150 years after birth for all living people
US08	Birth before marriage of parents	Children should be born after marriage of parents (and not more than 9 months after their divorce)

Totally 40 Stories to choose from...