cs190
Spring 2004
Requirements Elucidation Exercise

Scenario

Archer City, Texas, has become a happenin' place. The library has come by a windfall of books; not coincidentally, the population has grown rapidly. Lines are growing longer, books are hard to find, staff are overworked, and patrons (who often pack heat) are growing impatient and unhappy. The library, fixin' to solve these problems, calls on your consulting firm. Your task is to produce a requirements document for a system that will help address the library's needs.

The library's three key personnel happen to be in Dallas for the Intercontinental Chili Cookoff, so they stop by your consulting company's office to be interviewed. They are:

Jake Anker, *Technical Staff*

> Jake recently moved to Archer City from Dallas. He has a bachelor's degree in electrical engineering and some coursework in library science. He was hired by the library to help modernize its facilities. It's clear to him that most of the library's problems can be solved by the appropriate use of technology, and he hopes to convey this to the older staff.

W. Enright Drinkwater, *City Councilman with Library Oversight*

> Enright, who also owns the town's oldest smokehouse, handles the administrative end of the library, particularly its financials. He believes the library could be doing a lot more with less.

Spud McCarver, *Head of Circulation*

> Spud has been with the library for 30 years. He's driven the same pickup for the last 20. He loves the books, and is pretty attached to the card catalog the library uses to index its collection.

Logistics

You will get up to two meetings of fifteen minutes each with each of the personnel, to be scheduled in whatever order you wish. (That is, you have a total of 90 minutes of interview time available, if you want it.) The course staff will be in character precisely during these meetings, so you cannot ask course questions during the meetings or library questions outside. (You could try, but you'll be met with blank looks.)

You are interviewing the personnel, so *you* run the meetings. The library personnel are pretty busy, so they will terminate the interview when the fifteen minutes elapse or when you run out of

questions, whichever comes first. For this same reason, if you miss a meeting, they will not reschedule it.

At the end of your three meetings, you must produce:

1. A requirements document (actors, scenarios, use cases, non-functional requirements) that the library can use to design a solution.
2. An enumeration of any conflicts you encountered between the wishes of the personnel. For each conflict, describe how you resolved it in your requirements, justifying your choice.

Your use cases should not necessarily be limited to the situations the committee describes. If you foresee situations that didn't arise in your interviews, be sure to mention them.

Dramatis Personæ

Nathan Weston	…	Jake
John Goodwin	…	Enright
Shriram Krishnamurthi	…	Spud

Goal

The goal of this exercise is to make you interview people in diverse, sometimes non-technical, roles, and to practice reconciling requirements from different sources.