

# Best Practices

# Project Management

---

- ◉ Project Database
- ◉ File Management
  - Programs
  - Data
  - Naming
  - Organization
- ◉ Journals
  - Rationale for decisions
  - Ability to go back in time

# Project Database

Project Number

Project Name

Project Description

Requestor

Assigned

Assignment Date:

Expected Completion Date:

Completion/ Cancellation Date:

Project Status:

















IRT Report Number

PC Files / Programs













Paper Files

Comments

# File Management

| Name  | Date modified      | Type        | Size |
|---|--------------------|-------------|------|
|  2000 - 2001 Ad Hoc Projects | 1/13/2012 12:04 AM | File folder |      |
|  2001 - 2002 Ad Hoc Projects | 1/13/2012 12:04 AM | File folder |      |
|  2002 - 2003 Ad Hoc Projects | 1/13/2012 12:04 AM | File folder |      |
|  2003 - 2004 Ad Hoc Projects | 1/13/2012 12:04 AM | File folder |      |
|  2004 - 2005 Ad Hoc Projects | 1/13/2012 12:04 AM | File folder |      |
|  2005 - 2006 Ad Hoc Projects | 1/13/2012 12:05 AM | File folder |      |
|  2006 - 2007                 | 1/13/2012 12:06 AM | File folder |      |
|  2007 - 2008                 | 1/13/2012 12:07 AM | File folder |      |
|  2008 - 2009                 | 1/13/2012 12:09 AM | File folder |      |
|  2009 - 2010                 | 1/13/2012 12:12 AM | File folder |      |
|  2010 - 2011               | 8/28/2013 11:44 AM | File folder |      |
|  2011 - 2012               | 8/28/2013 11:44 AM | File folder |      |
|  2012 - 2013               | 12/6/2013 1:47 PM  | File folder |      |
|  2013 - 2014               | 1/15/2014 9:48 AM  | File folder |      |
|  Monthly Summaries         | 8/28/2013 11:44 AM | File folder |      |
|  Project List              | 1/15/2014 9:55 PM  | File folder |      |

# File Management

| Name  | Date modified        | Type        | Size |
|---|----------------------|-------------|------|
|  1314-010 Graduate Exit Survey 2010-11 th... | 1/15/2014 3:12 PM    | File folder |      |
|  1314-043 Loan Debt of EDU Majors            | 8/28/2013 11:44 AM   | File folder |      |
|  1314-110 Academic Advising Survey and ...   | 9/5/2013 10:11 AM    | File folder |      |
|  1314-163 Enrollment Audit                   | 1/8/2014 9:50 AM     | File folder |      |
|  1314-172 Term GPAs of Theater Majors        | 1/6/2014 8:47 AM     | File folder |      |
|  1314-174 Update Net Revenue Model           | 11/7/2013 9:26 AM    | File folder |      |
|  1314-204 Graduates and Leavers, Spring a... | 11/22/2013 1:05 PM   | File folder |      |
|  1314-205 Pre-List of Graduates              | 11/22/2013 1:10 PM   | File folder |      |
|  1314-214 LLP Retention Fall 2013            | 11/22/2013 11:48 ... | File folder |      |
|  1314-216 CLL GPA by Residence Hall, Fal... | 9/17/2013 9:40 AM    | File folder |      |
|  1314-219 NL First Year retention          | 9/16/2013 10:50 AM   | File folder |      |
|  1314-221 NL Retention                     | 12/3/2013 11:58 AM   | File folder |      |

# Version Control

---

- Software (Example: Apache Subversion)
- Manually
  - Active and Archive folders
  - Program naming
    - Descriptive – Conference Benchmarks SWC.sas
    - Date based – Conference Benchmarks 1995-12-31.sas
    - Version based – Conference Benchmarks V1.0.sas
- Backups

# Program Documentation

---

## ◎ Header Block

- Last Run Time
- Program name and location
- Author
- Purpose
- Inputs
- Output
- Modification history
- Execution instructions (prerequisites)

# Program Documentation

---

- Section descriptions
- Explanation of logic and methods
- References
- Data definitions
- Indention



# Programming Environments

TEST

---



PRODUCTION

---



# Program Validation

---

- ◉ Read the log

- Errors
- Warnings
- Notes
- Absence of errors is no guarantee of correctness

# Program Validation

---

- ◉ Programmer's Cardinal Rule
  - Know Thy Data
  - Understand the business process
- ◉ Manually calculate
  - Sample data
  - Multiple scenarios
- ◉ Frequency distribution
- ◉ Visually look at output
- ◉ Compare with historical data

# Additional Tips

---

- ◉ Smaller and simpler is better
- ◉ Consistency
  - Reusable code (macro programs)
  - Standardized field names
  - Standardized data (when possible)
- ◉ Accuracy over speed
  - *“Why is there never enough time to do it right but always enough time to do it over?”* - Unknown