Xtrain Supplementary Specification

Version 1.5

Revision History

Date	Version	Description	Author
March 5, 2003	1.0	Initial Draft	Steve Fitzgerald
March 13, 2003	1.1	Several Modifications, additional data fields	Steve Fitzgerald
March 28, 2003	1.2	FOT code is mandatory for both New appointments and reappointments, and needs to be captured as part of the appointment, not part of PPF. Removed PDF help file requirement	Steve Fitzgerald
March 31, 2003	1.3	Modified data definitions to clarify questions submitted from tester, added additional fields (degree sought information), removed DSF code.	Steve Fitzgerald
April 8, 2003	1.4	Several changes from requirements review	Steve Fitzgerald
April 10, 2003	1.5	Added several changes from Commons Analyst	Steve Fitzgerald

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Xtrain Supplementary Specification

1. Introduction

1.1 Purpose

This document describes the global non-functional and global functional requirements for Xtrain. It primarily consists of business rules involving data, but also mentions other factors to help assure that the application being built meets the interface, usability, performance, and security standards of the ERA project.

1.2 Scope

The document provides the supplementary requirements that apply Xtrain. Some of the requirements mentioned are global in nature and are apply to other business areas as well.

1.3 References

Xtrain 2.0 Scope document.

eRA Commons Style Guide

eRA Email Messaging System

1.4 Overview

This document comprises section describing the Usability, Reliability, Performance and Scalability requirements for the eRA. It also documents global functional requirements, data entities, business rules and other constraints on the design of the system.

2. Functionality

The Xtrain system will provide the ability to submit electronic 2271 forms to NIH.
The Xtrain system will be integrated and built as part of the ERA COMMONS J2EE infrastructure.
As such, it will utilize the existing security, auditing, and hardware infrastructure as the rest of the ERA Commons.
Xtrain will allow Program Directors to delegate the entering of data to an assistant.

3. Usability

3.1 GUI Standards

The GUI Standards for the eRA Project are defined in the "Standards Library::User Interface Standards" document contained in CVS://architecture/docs/guidelines/UI Standards.doc

3.2 Reliability

See Commons Supplementary Specification.

4. Performance

4.1 Response Time

~~Xtrain will maintain a response time that is within industry standards.~~
~~The user should not have to wait more than 10 seconds for any screen to refresh.~~
~~If the response time is greater than 10 seconds, the system will display a message to the user indicating that the system is working on their request. This response time is based on a user connected to the Internet on a high speed connection, such as T1, DSL, or cable modem.~~
Xtrain will conform to eRA Commons response time standards.

5. Data Entities

5.1 Trainee Data Elements

Feild	Source of Screen Fields	Description	Unique	Mandatory	New Appointment NA Reappointment R Amdendment A	Business Rules
Grant #	1. PHS GRANT NUMBER	A combination of Grant type code, activity code, admin phs org code, serial number, support year, and suffix code. Ex. 5 T32 HL123456-01	Y, unique for training grants	Y	NA, R, A	1. Required for Trainee Appointment. 2. Grant number must be valid (in APPLS_T). 3. Only training grants will be accepted by system. (Activity Code like 'T%')
Last Name First Name MI	2. TRAINEE'S NAME (Last, first, initial)	Last Name First Name Middle Initial	N N N	Y Y N	NA, R, A	FIRST NAME max length(30), LAST NAME max length(30), MIDDLE INITIAL max length(1)
Address	9. Permanent Mailing Address	Permanent Mailing Address of trainee. It is the address where the appointed individual can be reached by mail after completion of the program.	Y, unique for each appointment.	Y	NA, R, A	Address type ='RES' Role or profile addresses to be determined by design/developers. Address change for existing trainee should be applied to both profile and role records.
Email Address	9b. Email Address	Email address of Trainee	Y, unique for each appointment	N	NA, R, A	Max length =80 Must be a valid email format. Must contain an '@' sign. Prefix must be only numbers or letters (before @ sign)
Birth date	7. Birthdate of trainee	Birthdate of trainee		N, but highly suggested	NA, R, A	MM/DD/YYYY
SSN	6. Trainee Social Security Number	Trainee Social Security Number		N, but highly suggested.	NA, R, A	Must be 9 numbers

Feild	Source of Screen Fields	Description	Unique	Mandatory	New Appointment NA Reappointment R Amdendment A	Business Rules
Prior Support Indicator	5. Prior Support Indicator	Prior support Indicator (Boolean)			NA	For Amendments and reappointments, system will already know and display previous support. For new appointments, we will need to add this information.
Citizenship Indicator	8. Citizenship Indicator	Citizenship Indicator 1) US Citizen or US National 2) Permanent Resident of US		Y	NA	
Hispanic/Latino Indicator	10. Hispanic/Latino Indicator	A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino".		Y	NA	Must include the following choices:. Yes NO Not known/withheld. (RACE_TYPE_CODE)
Race	11. Race	Race Indicators	N	N	NA	Based on valid values: American Indian or Alaskan Asian Black or African American Hispanic or Latino White Native Hawaiian or Pacific Islander Intentionally withheld

Feild	Source of Screen Fields	Description	Unique	Mandatory	New Appointment NA Reappointment R Amdendment A	Business Rules
From Date	13. PERIOD OF APPOINTMENT (Month, day, year)	Start Date of Appointment	N	Y	NA, R, A	1. Format: MM/DD/YYYY 2. Required. (Through edit checker)
To Date	13. PERIOD OF APPOINTMENT (Month, day, year)	End Date of Appointment	N	Y	NA, R, A	1. Format: MM/DD/YYYY 2. Required. (Through edit checker)
Months	13. PERIOD OF APPOINTMENT (Month, day, year)	Total Months of Appointment	N	Y	NA, R, A	1. Display ONLY 1.2. Total months calculated through From Date and To Date fields.
Days	13. PERIOD OF APPOINTMENT (Month, day, year)	Total Days	N	Y	NA, R, A	1. Display ONLY 1.2. Total days calculated by subtracting From Date and To Date fields.
Education –Name of Institution	14a. EDUCATION-AFTER HIGH SCHOOL	Institution name	N	N	NA, R, A	1. There can be several education records entered.
Degree/Type	14c. EDUCATION-AFTER HIGH SCHOOL (Degree Type)	Type of Degree Earned- See Business rules for valid values.	N	Y- education is not mandatory, but if an education record is entered, then system should require this field.	NA, R, A	5.1. Must conform to Commons degree requirements, changing in July 2003 release.
Degree Date	14b. EDUCATION-AFTER HIGH SCHOOL (degree date)	Month/year that degree was earned	N	Y, education is not mandatory, but if an education record is entered, then system should require this field.	NA, R, A	1. List ordered from Highest to lowest degree.

Feild	Source of Screen Fields	Description	Unique	Mandatory	New Appointment NA Reappointment R Amdendment A	Business Rules
Stipend Level	18. Pick List of Available Stipend Levels.	List of stipend levels	Y- Unique for each appointment. Each appointment can only have one stipend level associated with it.	Y	NA, R, A	The stipend levels should display from the stipend levels lookup table, and display values for the appropriate fiscal year of the grant. Stipends change annually, and the levels are stored for each fiscal year. The stipend level will change depending upon the year. For Example: 1. F/S - 7,296 PRE-BAC 2. J/S - 10,224 PRE-BAC 3. PRE - 19,968 PRE-DOC 4. 0 - 34,200 POST-DOC 5. 1 - 36,108 POST-DOC 6. 2 - 40,920 POST-DOC 7. 3 - 42,648 POST-DOC 8. 4 - 44,364 POST-DOC 9. 5 - 46,404 POST-DOC 10. 6 - 48,444 POST-DOC 11. 7 - 50,808 POST-DOC
Stipend	18. SUPPORT FOR PERIOD OF APPOINTMENT - STIPEND	Amount of Stipend	Each appointment can only have one stipend associated with it.	Y	NA, RA, A	1. When entering stipend information, the stipend amount field will be prepopulated based on the values selected with the stipend level. User can over-ride system populated values. 2. Stipend amount is automatically populated by the system but can be modified. 3. Value should be rounded to whole dollar amounts (omit cents)

Feild	Source of Screen Fields	Description	Unique	Mandatory	New Appointment NA Reappointment R Amdendment A	Business Rules
Tuition/Fees	18. SUPPORT FOR PERIOD OF APPOINTMENT – Tuition/Fees (estimated)	Tuition and Fees	Each appointment can have only one tuition /fees value associated with it.	N	NA, R, A	1. For existing appointments, tuition fee amount is displayed by the system but can be modified. 2. Value should be rounded to whole dollar amounts (omit cents)
Travel	18. SUPPORT FOR PERIOD OF APPOINTMENT – Travel (estimated)	Travel Amount	Each appointment can have only one travel amount associated with it.	N	NA, R, A	1. NUMBER(10) 2. For existing appointments, Travel amount is automatically populated by the system but can be modified. 3. Value should be rounded to whole dollar amounts (omit cents)
TOTAL	18. SUPPORT FOR PERIOD OF APPOINTMENT – TOTAL	Total Amount of Support	Each appointment can have only one total amount associated with it.	Y, System populated	NA, R, A	1. Number(10) 2. Sum of Stipend, Tuition/Fees, and Travel fields. 3. Value should be rounded to whole dollar amounts (omit cents)
FOT (LOV)	12. FIELD OF TRAINING	Field of Training	Y	Y	NA, R, A	1. 4 – digit code, can be typed in or through list of values popup screen. 2. System will populate Field Of Training description based on 4-digit code entered.
DSF (LOV)	An approved list of Discipline/ Specialty Field Codes.	Discipline/Specialty Field	Y	Y	NA, R, A	1.3 digit code, can be typed in or through list of values popup screen. 2.System will populate DSF description based on 3-digit code entered.
Major Field	14d. Major Field of Study	Major Field of Study	Y, per appointment	N	NA, R	1. A code from a list of valid study fields. (Study_Fields_t).
Minor Field	14e. Minor Field of Study	Minor Field of Study	Y, per appointment	N	NA, R	4.2. A code from a list of valid study fields. (Study_Fields_t)

Feild	Source of Screen Fields	Description	Unique	Mandatory	New Appointment NA Reappointment R Amendment A	Business Rules
Degree Sought Indicator	16. Degree Sought Indicator	An indicator if trainee is seeking a degree at time form is filled out.	y	Y	NA, R	5.Valid Values 0 Not stated or cannot be determined 1 Seeking no degree 2 Seeking baccalaureate degree 3 Seeking masters degree 4 Seeking academic doctorate 5 Seeking professional doctorate
Completion Date of Degree Sought	17. Completion Date	Month and year that degree is expected to be completed.	y	Y, if degree is being sought (deg_sourght indicator code > 0)	NA, R	MM//YYYY
Dual Degree Indicator	16b. Dual Degree Indicator	If trainee is seeking a degree, then are they in a dual degree program.	Y	Y, if degree sought indicator code > 0	NA, R	Boolean (Y,N)
Nondelinquency of Federal Debt Indicator	19. Federal Debt Delinquency Indicator	Federal Debt Delinquency Indicator	Y	Y	NA, R	Boolean (Y,N)
Federal Debt Indicator Explanation	19. Federal Debt Indicator Explanation	Federal Debt Indicator Explanation	Y	Required if debt indicator = Y	NA, R	Required if debt indicator = Y

6. Business Rules

6.1 Rules

6.1.1 Limit on Concurrent Training Appointments

a. Trainees can only be assigned to one trainee appointment at a time. When creating a new appointment, or when doing an amendment or re-appointment, the system should check to make sure the trainee is not already assigned to another training grant for the specified project period. (between project period start and end dates). If the system finds a trainee is already assigned to a grant for the current project period, **the system should display a warning** to the user 'Trainee is already assigned to training grant for the specified project period." **(There may be exceptions, such as when a trainee is serving part time on more than one grant. Need to check with policy office to see if this is a possibility.)**

6.1.2 Trainee Appointment Start Date < Appointment End Date

6.1.3 Trainee Appointment Start Date >= Project Period Start Date

6.1.4 Trainee Appointment End Date <= Project Period End Date

6.1.5 Profile vs. Role data

For person related data, only changes to the RES address types will also modify the profile. All other person changes will only occur at the role level. This is required because the trainees do not currently 'use' the system, and therefore cannot be the owners of their profile data.

7. Documentation and Help System Requirements

[This section describes the kinds of documentation the system requires, both printed and online]

7.1 Online Help

Help should be available online as html links.

The help file content should conform to ERA Commons help file standards.

7.2 Printed Documents

The following documents will be prepared for Xtrain version 2.0.

1) Scope Document

2) Requirements documents (Use cases)

3) Design Document

4) Test Plan

5) Deployment Plan