## IS345 Systems Analysis

## **Team Camassia**

Sarah Callaway Brady Esplin Sam Petty

## **User Classes**

User Class Detail Forms

User Class: Student		Sarah Callaway
Characteristic	Value	Implication
Type of user	<u>Direct</u> / Indirect / Remote / Support / Developer	Ensure the front end UI is intuitive for ease of student use.
Experience level of user	Low	Since most users have a low experience level the system must be very intuitive. Add a small help button next to fields for clarifications.
Frequency of use of system	2x/term	User class will likely begin by being very inexperienced with the system and gradually grow more experienced during their years at WOU. New students will likely need the most assistance with the program.
Use choice status	Mandatory	A positive user experience should be prioritized, as the user may not be pleased to be forced to use this program.
Existing experience and skills	None	Ease of use and intuitive design should be foremost in our design decisions.
Other systems that they use concurrently	Canvas, Student Information System (e.g grades, payments, demographics).	Maintaining interoperability between the systems so that the student doesn't see any discrepancy during this process is important.
Education / intellectual abilities	High School, Associates, Bachelors/ low-high	Due to the range of intellectual abilities, the system should be user friendly and easily navigable.
Motivation for using the system and specific goals	To register for classes in order to graduate	Our design should be focused on making registration and ultimately graduation easier.

Number of users	3,000-6,000	This is the most numerous user class, we need to ensure that the system can withstand a high user volume during registration and preregistration periods.
Tasks performed	Planning for registration, registering	This is the primary purpose of this system, so functionality must be maintained during and after rollout.
General characteristics	Age: Mixed, Gender: Mixed, Cultural Affiliation: Mixed	A variety of viewpoints and feedback regarding the system should be considered.
Homogeneity	Low	Diversity should be well-represented during the requirements engineering process.
Physical characteristics and capabilities	Student cultural and educational backgrounds will be varied and diverse. Student physical and mental capabilities will vary wildly.	Functionality should ensure accessibility for all students.
Language	English, Spanish, Chinese, ASL	The product and training information should have support for multiple languages.
Extent of task knowledge needed	Very Low	Student training (in the video or with advisors) and tips should be focused on actually registering and planning.
Training received on systems	None to little	We may want to collaborate with advisors and IT after releases to determine what students are struggling with so we can improve our tooltips and help documentation and review our product to see if new requirements need to be implemented.
Learning style Preference	Optional Video Tutorial	The video should be available to view at any time, in case students need a refresher on

		how to use the system.
Organizational position	Customer	The student class is an enduser, and as a customer, they are partially funding this product through their tuition, so we should be responsive to their needs.
Ways of working	Computer-based	The system will be computer based, but should have smartphone and tablet functionality. Users will need basic computer literacy.

User Class: Advisor		Brady Esplin
Characteristic	Value	Implication
Type of user	<u>Direct</u> / Indirect / Remote / <u>Support</u> / Developer	This user class will be good for feedback as they are highly educated and work closely with the top user class
Experience level of user	High	Since most users have a low experience level the system must be very intuitive. Add a small help button next to fields for clarifications.
Frequency of use of system	Heavy use for two weeks prior to registration and one week following, occasional use other times	Likely very familiar with what works and what doesn't
Use choice status	Mandatory	Might not be happy with current system
Existing experience and skills	Prior use of registration systems, familiarity with online course catalog	Likely have ideas about good features and bad
Other systems that they use concurrently	Ellucian, Google Suite	Might want future integrations?
Education / intellectual abilities	Minimum Bachelor's Degree/ high	Good group to test with
Motivation for using the system and specific goals	To help students plan and register for classes	Also might have insight into what students need

Number of users	150-200	Large pool to choose from
Tasks performed	Planning for registration, registering	Same as student user class, but more involved and more often
General characteristics	Age: 35-65, Gender: Mixed, Cultural Affiliation: Mixed	No implications can be drawn from this broad information set
Homogeneity	Medium	No implications can be drawn from this broad information set
Physical characteristics and capabilities	Advisors will likely be well educated with a normal range of capabilities	Advisor likely have had past experience with other registration systems
Language	English, Spanish, Chinese, ASL	Training material and presentation should be in multiple languages
Extent of task knowledge needed	High	Will likely know what features are intuitive and what features are not
Training received on systems	High	Will be good to get feedback on training processes from this user class
Learning style Preference	Tutorial	Presentations if in-person, videos if asynchronous online, and Zoom classes if synchronous online
Organizational position	Employee	The user class can be used effectively to get user requirements and feedback from. They will be instrumental in voicing both the needs of the student user class and other employee user classes.
Ways of working	Computer-based	The system will be computer based, but should have smartphone and tablet functionality. Users will need basic computer literacy.

User Class: Professor/Faculty		Sam Petty
Characteristic	Value	Implication
Type of user	<u>Direct</u> / Indirect / Remote / <u>Support</u> / Developer	Usage will be low, so front end and back end both need to be intuitive to make things easy on

		the transition to newer systems.
Experience level of user	Low/Compartmentalized	Since most users have a low experience level the system must be very intuitive. Add a small help button next to fields for clarifications.
Frequency of use of system	Medium use the week of registration	Might need a printed sheet to help with low usage to explain some processes.
Use choice status	Mandatory	Might not like some of the new features being added.
Existing experience and skills	Experience with grading systems	Already used to the system from before, will just need to adjust to new features
Other systems that they use concurrently	Canvas, Google Suite	Might want other integrations
Education / intellectual abilities	Minimum Master's Degree/ high	High intelligence should adapt to new systems quickly
Motivation for using the system and specific goals	To override prerequisite requirements	Might not like having other things to do with the system
Number of users	350-450	Large pool of testers
Tasks performed	override prerequisite requirements	Should still be similar
General characteristics	Age: 30-75, Gender: Mixed, Cultural Affiliation: Mixed	Large bracket of individuals, makes for better understanding of what works and what doesn't
Homogeneity	Medium	Good mix of individuals
Physical characteristics and capabilities	Faculty will be highly educated with a normal range of capabilities	Likely already has experience with similar systems
Language	English, Spanish, Chinese, ASL	Instructions need to be in a multitude of languages, with options to switch between
Extent of task knowledge needed	Low/Compartmentalized	Will likely need training on newer systems
Training received on systems	Medium/Compartmentalized	Should be familiar with current systems, won't need much training
Learning style Preference	Tutorial	Needs written instructions

Organizational position	Employee	This user class is likely used to using registration systems in this manner and will likely have very firm ideas about what they want as features
Ways of working	Computer-based	The system will be computer based, but should have smartphone and tablet functionality. Users will need basic computer literacy

User Class: Registrar		Sarah Callaway
Characteristic	Value	Implication
Type of user	<u>Direct</u> / <u>Indirect</u> / Remote / <u>Support</u> / Developer	Interoperability and back-end functionality will need to be emphasized to enable the transfer of data between various systems.
Experience level of user	Medium	Since most users have a low experience level the system must be very intuitive. Add a small help button next to fields for clarifications.
Frequency of use of system	Heavy use	System needs to be quick and responsive. It needs to be able to update courses automatically when registrars input or change course data.
Use choice status	Mandatory	Seamless interoperability as users will not have a choice in the use of the product.
Existing experience and skills	Experience with prior registration systems, data entry	User class may have ideas and feedback based on their prior knowledge that we can draw upon while implementing and improving functionality.
Other systems that they use concurrently	Registrar Tracking System 1, Current registration system, Google Suite	Seamless integration; user class should not notice the transition between the system they use to enter course information and that information being mirrored to the registration system.
Education / intellectual abilities	High School-Bachelor/ low- high	Some of these users may also be in the student class.

Motivation for using the system and specific goals	Information input, gauge student engagement, enrollment rate, etc.	System should easily output this information, and intuitively input data. They can be a good source for determining how they want this data to be viewable.
Number of users	30-40	This is one of the lower - populated user groups.
Tasks performed	Pulling information from registration system for analysis, inputting information to registration system for display	Facilitate data extraction and input in design.
General characteristics	Age: Mixed, Gender: Mixed, Cultural Affiliation: Mixed	Our designers should consider the varied viewpoints and backgrounds of the users when designing the UI and the data outputs.
Homogeneity	Medium	A variety of backgrounds should be taken into account during design
Physical characteristics and capabilities	Characteristics and capabilities will vary wildly depending on employment	A variety of physical and mental capabilities should be taken into consideration during design; designs must be made accessible to all users. Since this system is designed, fundamentally, to allow students to register for classes, maintaining that functionality during the rollout is of primary importance
Language	English, Spanish, Chinese, ASL	Multilingual training support should be implemented.
Extent of task knowledge needed	Medium-High	Much of the input structures should not change since they will be handled by a different software, as such the training can focus on the new functionalities.
Training received on systems	High	Timeframe for training will need to be established.
Learning style Preference	Tutorial	Tutorials and guided sessions should be arranged.
Organizational position	Employee	End user - emphasis should be put on making this product easier for them to use than the

		previous one, as workplace change is often resisted.
Ways of working	Computer-based	The system will be computer based, but should have smartphone and tablet functionality. Users will need basic computer literacy.

User Class: College Administrator		Brady Esplin
Characteristic	Value	Implication
Type of user	<u>Direct</u> / Indirect / Remote / <u>Support</u> / Developer	Since most users have a low experience level the system must be very intuitive. Add a small help button next to fields for clarifications.
Experience level of user	Low	Since this user group will likely mostly work with back-end access we will need to see what training they do need
Frequency of use of system	Low	Only some employees may need training from us? Trainthe-trainer?
Use choice status	Discretionary	Not all users in class will need training from us, for those that do need to use the system, we would like to maintain a high level of customer approval.
Existing experience and skills	Word Processing, Spreadsheet Manipulation	User has minimum basic computer literacy
Other systems that they use concurrently	Administrator Software 1, Google Suite	Some familiarity with modern systems and software
Education / intellectual abilities	Bachelor's-Doctorate/ high	Good group to test with as they are slightly more highly educated to the very highest of education status
Motivation for using the system and specific goals	Determine future college direction	Niche use cases may require personalized training sessions
Number of users	40-50	Small number of total users, all might not need training
Tasks performed	Analyzing outputs pulled from registration system to determine metrics	Will need training on what information to collect if the automation pulling output

		breaks
General characteristics	Age: Mixed, Gender: Mixed, Cultural Affiliation: Mixed	Our designers should consider the varied viewpoints and backgrounds of the users when designing the UI and the data outputs.
Homogeneity	High	While the user group may present a similarity of backgrounds, designers still need to focus on accessibility for the highest range of users possible
Physical characteristics and capabilities	An average range of characteristics and capabilities	While the physical capabilities of this user group are not presented as being far from the mean, the designers still need to include accessibility features to allow use by as many users as possible
Language	English, Spanish, Chinese, ASL	Training and tutorial information should be presented in language of choice
Extent of task knowledge needed	Low- Medium/Compartmentalized	Training will need to be specialized per use
Training received on systems	Low- Medium/Compartmentalized	Training will need to be specialized per use
Learning style Preference	Tutorial	Presentations if in-person, videos if asynchronous online, and Zoom classes if synchronous online
Organizational position	Employee	End user - emphasis should be put on making this product easier for them to use than the previous one, as workplace change is often resisted.
Ways of working	Computer-based	The system will be computer based, but should have smartphone and tablet functionality. Users will need basic computer literacy.

User Class: Finance Department		Sam Petty
Characteristic	Value	Implication

Type of user	Direct / <u>Indirect</u> / Remote / <u>Support</u> / Developer	Won't have much interaction with the system if at all
Experience level of user	Low	Since most users have a low experience level the system must be very intuitive. Add a small help button next to fields for clarifications.
Frequency of use of system	Low	Likely won't interact with the system directly
Use choice status	Mandatory	Has systems that communicate with the system being modified.
Existing experience and skills	Data Entry, Word Processing, Spreadsheet Manipulation	Wide variety of knowledge base from different systems.
Other systems that they use concurrently	Finance Software 1, Google Suite	Need to make sure systems all communicate just as well if not better than before.
Education / intellectual abilities	Bachelor's-Master's/ high	This should be a good user class to engage with concerning UX
Motivation for using the system and specific goals	Maintain financial solvency of college	Must make sure that information is submitted correctly, and reliably
Number of users	20-30	Low test pool
Tasks performed	Accessing student registration records for billing purposes	Tasks shouldn't change from what they are now.
General characteristics	Age: Mixed, Gender: Mixed, Cultural Affiliation: Mixed	Our designers should consider the varied viewpoints and backgrounds of the users when designing the UI and the data outputs.
Homogeneity	High	While the user group may present a general similarity, designers still need to focus on accessibility for the highest range of users possible
Physical characteristics and capabilities	Range of capabilities and characteristics will depend on employment	While the physical capabilities of this user group are not presented as being far from the mean, the designers still need to include accessibility features to allow use by as many users as possible
Language	English, Spanish, Chinese, ASL	Any training will need to be available in the users language of choice

Extent of task knowledge needed	High/Compartmentalized	Might need specialized training
Training received on systems	High/Compartmentalized	Might need specialized training
Learning style Preference	Tutorial	Will desire written or video instructions.
Organizational position	Employee	End user - emphasis should be put on making this product easier for them to use than the previous one, as workplace change is often resisted.
Ways of working	Computer-based	The system will be computer based, but should have smartphone and tablet functionality. Users will need basic computer literacy.