Table 4.15. User Functional Requirements: UF-A

Project Name:	Intelligent Acade	emic Planner						
Requirement #:	UF-A	UF-A			Functional	Non-Functional		
Creation:	Sep 20 2016 01:25	Sep 20 2016 01:25 PM			×			
Modification:	Oct 05 2016 01:50	Oct 05 2016 01:50 AM						
Description:	A user can log in.	A user can log in.						
Priority:	Highest	✓ High	Medium	Low	L	.owest		
This Req. is Refin	ed Into:	SF-A-01		·	·			
Justify why UF-A covered by SF-A-	can be completely 01	If a user can login	within 5 seconds	, they can log	in properly.			
Tropophility	Use cases cf.	UC-016						
пасеарину.	Traceability: Test cases cf. TC-001, TC-018							
Acknowledgment	Generated from the	CapStone Process	Management Sys	stem ©2015				

Table 4.16. User Functional Requirements: UF-B

Project Name:	Intelligent Acade	emic Planner					
Requirement #:	UF-B	UF-B			Functional	Non-Functional	
Creation:	Sep 20 2016 04:17	Sep 20 2016 04:17 PM			×		
Modification:	Oct 05 2016 01:50	AM		System			
Description:	A user can log out.	A user can log out.					
Priority:	Highest	✓ High	Medium	Low	l	_owest	
This Req. is Refin	ed Into:	SF-B-01					
Justify why UF-B covered by SF-B-	can be completely 01	If a user can log ou	t within 5 seconds,	they can lo	g out prope	dy	
Tracability	Use cases cf.	UC-018					
Traceability:	Test cases cf.	TC-002					
Acknowledgment	Generated from the	CapStone Process	Management Syste	m ©2015			

Table 4.17. User Functional Requirements: UF-C

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	UF-C			Туре	Functional	Non-Functional	
Creation:	Sep 20 2016 04:18	Sep 20 2016 04:18 PM			×		
Modification:	Sep 20 2016 04:58	Sep 20 2016 04:58 PM					
Description:	A user can ask the	system questions.					
Priority:	✓ Highest	High	Medium	Low		Lowest	
This Req. is Refin	ed Into:	SF-C-01, SF-C-04					
		If the system is abl	e to perform the fund	tionality ir	SF-C-01 th	rough SF-C-06	
Justify why UF-C	can be completely	then a user will undoubtedly have been able to ask the system questions. The					
covered by SF-C-	01, SF-C-04	system would not be able to perform these functions without a user first asking					
		it a question.					
Tracoability	Use cases cf.	UC-011, UC-012					
Traceability:	Test cases cf.	TC-004, TC-007					
Acknowledgment	Generated from the	he CapStone Process Management System ©2015					

Table 4.18. User Functional Requirements: UF-D

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	UF-D	UF-D				Non-Functional	
Creation:	Sep 23 2016 12:52	Sep 23 2016 12:52 PM					
Modification:	Oct 05 2016 01:51	Oct 05 2016 01:51 AM					
Description:	A user should recei	A user should receive multiple responses to a question.					
Priority:	Highest	High	Medium	✓ Low Lowest			
This Req. is Refin	ed Into:	SF-D-01					
Justify why UF-D	can be completely	By requiring a mini	mum of 1 response	to be given	, it is a giver	that multiple	
covered by SF-D-	01	responses are give	n to a question.				
Traca ability	Use cases cf.	UC-012					
Traceability:	Test cases cf.	TC-007, TC-014					
Acknowledgment	Generated from the	CapStone Process	Management Syste	m ©2015			

Table 4.19. User Functional Requirements: UF-E

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	UF-E			Туре	Functional	Non-Functional	
Creation:	Oct 04 2016 11:51	Oct 04 2016 11:51 PM			×		
Modification:	Oct 05 2016 12:06	Oct 05 2016 12:06 AM					
Description:	A user can create a	user can create a profile					
Priority:	Highest	High	✓ Medium	Low	Low Lowest		
This Req. is Refin	ed Into:	SF-E-01, SF-E-02, S	F-E-03, SF-E-04, SF-E	-05			
	can be completely 01, SF-E-02, SF-E- 05	All of the system re their profile.	quirements associa	ted with th	iis cover wha	t can be put into	
Tracoability	Use cases cf.	UC-001, UC-005, UC	C-013, UC-015, UC-01	9			
Traceability:	Test cases cf.	TC-008, TC-009, TC-011, TC-015					
Acknowledgment	Generated from the	the CapStone Process Management System ©2015					

Table 4.20. User Functional Requirements: UF-F

Project Name:	Intelligent Acade	emic Planner				
Requirement #:	UF-F	UF-F			Functional	Non-Functional
Creation:	Oct 05 2016 12:15	AM		User	×	
Modification:	Oct 05 2016 01:51	AM		System		
Description:	A user can register	A user can register				
Priority:	Highest	✓ High	Medium	Low		Lowest
This Req. is Refin	ed Into:	SF-F-01			·	
Justify why UF-F covered by SF-F-	can be completely 01	If a user can registe	er within 5 seconds,	they can r	egister prop	erly.
Traccability	Use cases cf.	UC-004				
Traceability:	Test cases cf.	TC-003, TC-019				
Acknowledgment	Generated from the	CapStone Process	Management Systen	ı ©2015		

Table 4.21. User Functional Requirements: UF-G

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	UF-G			Туре	Functional	Non-Functional	
Creation:	Oct 05 2016 12:36	Oct 05 2016 12:36 AM					
Modification:	Apr 05 2017 08:11 AM						
Description:	A user can view a lo	A user can view a log of asked questions.					
Priority:	Highest	High	✓ Medium	Low	L	.owest	
This Req. is Refin	ed Into:	SF-G-01					
Justify why UF-G	can be completely	If a student can ser	nd their log of ask	ed questions	to an adviso	or, then they can	
covered by SF-G-	01	also view the questi	ons they asked.				
Traceability:	Use cases cf.	UC-006					
maceability.	Test cases cf.	TC-022					
Acknowledgment	Generated from the	CapStone Process I	Management Syst	tem ©2015			

Table 4.22. User Functional Requirements: UF-H

Project Name:	Intelligent Acade	emic Planner					
Requirement #:	UF-H	UF-H				Non-Functional	
Creation:	Oct 05 2016 02:12	Oct 05 2016 02:12 AM					
Modification:	Oct 05 2016 02:16	Oct 05 2016 02:16 AM					
Description:	A user can provide information to improve accuracy of the system.						
Priority:	Highest	High	✓ Medium	Low	L	_owest	
This Req. is Refin	ed Into:	SF-H-01			·		
Justify why UF-H covered by SF-H-	can be completely 01	If answer quality fee increased.	edback is submitted,	accuracy	of response	es can be	
Tropophility	Use cases cf.	UC-007, UC-010					
Traceability:	Test cases cf.	TC-005					
Acknowledgment	Generated from the	CapStone Process I	Management Systen	ı ©2015			

Table 4.23. User NonFunctional Requirements: UP-03

Project Name:	Intelligent Acad	emic Planner						
Requirement #:	UP-03			Туре	Functional	Non-Functional		
Creation:	Oct 05 2016 01:36	Oct 05 2016 01:36 AM				×		
Modification:	Oct 05 2016 01:54	Oct 05 2016 01:54 AM						
Descriptions	A user should receive a quick response after asking a			Product	Product (sub-type below)			
Description:	question			Perform	Performance Requirements			
Priority:	Highest	High	Medium	✓ Low Lowest		.owest		
This Req. is Refin	ed Into:	SP-03-01						
Justify why UP-03	can be	By specifying perfo	rmance requiremen	ts, it is ens	ured that the	e question will be		
completely cover	ed by SP-03-01	answered in a quic	k manner.					
Traceability:	Use cases cf.	NA						
Haceability.	Test cases cf.	TC-017						
Acknowledgment	Generated from the	CapStone Process	Management Syster	m ©2015				

Table 4.24. User NonFunctional Requirements: UP-01

Project Name:	Intelligent Acad	emic Planner						
Requirement #:	UP-01	UP-01			Functional	Non-Functional		
Creation:	Oct 05 2016 12:10	Oct 05 2016 12:10 AM						
Modification:	Oct 05 2016 01:53	Oct 05 2016 01:53 AM						
Description:	A user's profile should be secure.			Product	Product (sub-type below)			
	P				Dependability/Reliability/Security			
Priority:	Highest	✓ High	Medium	Low	l	_owest		
This Req. is Refin	ed Into:	SP-01-01						
Justify why UP-01 completely cover		Ensures only speci	fic people can view	a user's pr	ofile, making	j it secure.		
Tracachilitu	Use cases cf.	N/A						
Traceability:	Test cases cf.	TC-009						
Acknowledgment	Generated from the	CapStone Process	Management Syste	n ©2015				

Table 4.25. User NonFunctional Requirements: UO-01

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	UO-01			Туг	Эе	Functional	Non-Functional
Creation:	Sep 23 2016 12:42	Sep 23 2016 12:42 PM			er		
Modification:	Oct 05 2016 01:53	Oct 05 2016 01:53 AM			:em		
Description:	A user's session sh	A user's session should be managed.			Organizational (sub-type below) Development Requirements		
Priority:	Highest	✓ High	Medium	Low		I	_owest
This Req. is Refin	ned Into:	SO-01-01		·			
Justify why UO-01 completely cover		Ensures that a use	er can only be lo	ogged in for	1 ho	our, managir	ng their session.
Tropophility	Use cases cf.	NA					
Traceability:	Test cases cf.	TC-024					
Acknowledgment	Generated from the	CapStone Process	Management Sy	/stem ©201	5		

Table 4.26. System Functional Requirements: SF-A-01

Project Name:	Intelligent Acade	emic Planner				
Requirement #:	SF-A-01	SF-A-01				Non-Functional
Creation:	Sep 23 2016 12:22	Sep 23 2016 12:22 PM				
Modification:	Oct 05 2016 01:41	Oct 05 2016 01:41 AM				
Description:	The system should	The system should log-in a user within 5 seconds.				
Priority:	Highest	High	Medium	✓ Low Lowest		
This Req. is Engir	neered From:	UF-A				
Justify why meeti	- T	Provides performan	ce requirement for lo	gging in.		
Traccability	Use cases cf.	UC-007, UC-016				
Traceability:	Test cases cf.	TC-001, TC-018				
Acknowledgment	Generated from the	CapStone Process	Management System	© 2015		

Table 4.27. System Functional Requirements: SF-B-01

Project Name:	Intelligent Academic Planner						
Requirement #:	SF-B-01			Туре	Functional	Non-Functional	
Creation:	Sep 23 2016 12:32	Sep 23 2016 12:32 PM					
Modification:	Oct 05 2016 01:41	System	×				
Description:	The system should						
Priority:	Highest	High	Medium	✓ Low	L	_owest	
This Req. is Engir	neered From:	UF-B			·		
Justify why meeti	ing SF-B-01 can fulfilment of UF-B	Explains performar	nce requirement.				
Traceability:	Use cases cf.	UC-018					
maceability.	Test cases cf.	TC-002					
Acknowledgment	Generated from the CapStone Process Management System ©2015						

Table 4.28. System Functional Requirements: SF-C-01

Project Name:	Intelligent Acad	Intelligent Academic Planner							
Requirement #:	SF-C-01	SF-C-01				Non-Functional			
Creation:	Sep 20 2016 04:22	Sep 20 2016 04:22 PM							
Modification:	Oct 05 2016 01:42	System	×						
Description:	The system should	The system should conduct textual analyses.							
Priority:	Highest	✓ High	Medium	Low	L	.owest			
This Req. is Engir	neered From:	UF-C			·				
Justify why meeti	ing SF-C-01 can fulfilment of UF-C	In order to provide a perform this function	•	stions asked,	system mus	st be able to			
Tracability	Use cases cf.	UC-011, UC-012							
Traceability:	Test cases cf.	TC-004, TC-007							
Acknowledgment	Generated from the	enerated from the CapStone Process Management System ©2015							

Table 4.29. System Functional Requirements: SF-C-04

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	SF-C-04			Туре	Functional	Non-Functional	
Creation:	Sep 20 2016 04:34	Sep 20 2016 04:34 PM					
Modification:	Oct 05 2016 01:44	Oct 05 2016 01:44 AM					
Description:	The system should	he system should gather data unique to each user.					
Priority:	Highest	High	✓ Medium	Low	L	_owest	
This Req. is Engir	neered From:	UF-C					
Justify why meeti	ng SF-C-04 can fulfilment of UF-C	This allows question	ns to be answered	l more accur	ately.		
Tracability	Use cases cf.	UC-011, UC-012					
Traceability:	Test cases cf.	TC-004, TC-007					
Acknowledgment	Generated from the CapStone Process Management System ©2015						

Table 4.30. System Functional Requirements: SF-D-01

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	SF-D-01			Туре	Functional	Non-Functional	
Creation:	Sep 23 2016 12:54	Sep 23 2016 12:54 PM					
Modification:	Oct 05 2016 01:46	Oct 05 2016 01:46 AM					
Description:	The system should show a minimum of 1 related search/question.						
Priority:	Highest	High	Medium	✓ Low	I	_owest	
This Req. is Engir	neered From:	UF-D					
Justify why meeti	ng SF-D-01 can fulfilment of UF-D	This allows respons	ses to be structured	and more	accurate.		
Tracability	Use cases cf.	UC-012					
Traceability:	Test cases cf.	TC-007, TC-014					
Acknowledgment	Generated from the CapStone Process Management System ©2015						

Table 4.31. System Functional Requirements: SF-E-01

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	SF-E-01			Туре	Functional	Non-Functional	
Creation:	Oct 04 2016 11:56	Oct 04 2016 11:56 PM					
Modification:	Oct 05 2016 01:46 AM				×		
Description:	The system should allow between 100 and 600 words to describe a user's academic and professional interests.						
Priority:	✓ Highest	High	Medium	Low	L	_owest	
This Req. is Engir	neered From:	UF-E					
Justify why meeti contribute to the	ng SF-E-01 can fulfilment of UF-E	Allows user to ente	er information about	themselves	to their pro	file	
Tracoability	Use cases cf.	UC-013					
Traceability:	Test cases cf.	TC-008					
Acknowledgment	Generated from the CapStone Process Management System ©2015						

Table 4.32. System Functional Requirements: SF-E-02

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	SF-E-02			Туре	Functional	Non-Functional	
Creation:	Oct 04 2016 11:56 PM						
Modification:	Oct 05 2016 01:47 AM				×		
Description:	The system should allow a user to submit 100 words of self-description about their personality.						
Priority:	Highest	High	✓ Medium	Low	I	_owest	
This Req. is Engir	neered From:	UF-E					
Justify why meeti	ing SF-E-02 can fulfilment of UF-E	Allows user to ente	r personality inform	nation on the	eir profile		
Tracability	Use cases cf.	UC-013					
Traceability:	Test cases cf.	TC-008					
Acknowledgment	Generated from the	CapStone Process I	Management Syste	m ©2015			

Table 4.33. System Functional Requirements: SF-E-03

Project Name:	Intelligent Academic Planner							
Requirement #:	SF-E-03			Туре	Functional	Non-Functional		
Creation:	Oct 05 2016 12:00 AM							
Modification:	Oct 05 2016 01:47	System	×					
Description:	The system should allow a user to view their personality assessments.							
Priority:	Highest	✓ High	Medium	Low	L	_owest		
This Req. is Engir	neered From:	UF-E						
Justify why meeti	ng SF-E-03 can fulfilment of UF-E	Allows a user to lea	arn about themselve	es based or	n profile infor	mation.		
Tracability	Use cases cf.	UC-005, UC-013						
Traceability:	Test cases cf.	TC-011						
Acknowledgment	Generated from the CapStone Process Management System ©2015							

Table 4.34. System Functional Requirements: SF-E-04

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	SF-E-04			Туре	Functional	Non-Functional	
Creation:	Oct 05 2016 01:43	Oct 05 2016 01:43 AM					
Modification:	Oct 05 2016 01:48	System	×				
Description:	The system should create a personality assessment unique to each user based on the data gathered.						
Priority:	Highest	High	✓ Medium	Low	l	_owest	
This Req. is Engir	neered From:	UF-E					
Justify why meeti contribute to the	ng SF-E-04 can fulfilment of UF-E	Allows user to view not input.	information about th	emselves	on their prof	file that they did	
Tracoability	Use cases cf.	UC-013, UC-015					
Traceability:	Test cases cf.	TC-009, TC-015					
Acknowledgment	Generated from the	nerated from the CapStone Process Management System ©2015					

Table 4.35. System Functional Requirements: SF-E-05

Project Name:	Intelligent Acad	ntelligent Academic Planner							
Requirement #:	SF-E-05			Туре	Functional	Non-Functional			
Creation:	Oct 05 2016 01:45	Oct 05 2016 01:45 AM							
Modification:	Oct 05 2016 01:45	System	×						
Description:	The system should advisor directing the								
Priority:	Highest	High	✓ Medium	Low Lowest					
This Req. is Engir	neered From:	UF-E							
Justify why meeti	ng SF-E-05 can fulfilment of UF-E	Allows user to get a	assistance from advi	sors base	d on their pr	ofile.			
Traceability:	Use cases cf.	UC-001, UC-013, UC-015, UC-019							
Haceability.	Test cases cf.	TC-009							
Acknowledgment	Generated from the	Generated from the CapStone Process Management System ©2015							

Table 4.36. System Functional Requirements: SF-F-01

Project Name:	: Intelligent Academic Planner							
Requirement #:	SF-F-01			Туре	Functional	Non-Functional		
Creation:	Oct 05 2016 12:16 AM							
Modification:	Oct 05 2016 01:49	Oct 05 2016 01:49 AM						
Description:	The system should	The system should register the user within 5 seconds.						
Priority:	Highest	High	✓ Medium	Low	I	_owest		
This Req. is Engir	neered From:	UF-F						
Justify why meeti	ng SF-F-01 can fulfilment of UF-F	Places a performan	ce requirement on r	egistration				
Traceability:	Use cases cf.	UC-004						
maceability.	Test cases cf.	TC-003, TC-019						
Acknowledgment	Generated from the	Generated from the CapStone Process Management System ©2015						

Table 4.37. System Functional Requirements: SF-G-01

Project Name:	Intelligent Acad	emic Planner						
Requirement #:	SF-G-01			Туре	Functional	Non-Functional		
Creation:	Oct 05 2016 12:37	User						
Modification:	Apr 05 2017 08:10	System	×					
Description:	The system should allow users to send a list of asked questions to advisors							
Priority:	Highest	High	✓ Medium	Low	L	.owest		
This Req. is Engir	neered From:	UF-G						
Justify why meeti	ng SF-G-01 can fulfilment of UF-G	Adds security						
Traceability:	Use cases cf.	UC-006						
пасеарицу.	Test cases cf.	TC-022						
Acknowledgment	Generated from the CapStone Process Management System ©2015							

Table 4.38. System Functional Requirements: SF-H-01

Project Name:	Intelligent Acad	emic Planner					
Requirement #:	SF-H-01			Туре	Functional	Non-Functional	
Creation:	Oct 05 2016 02:15 AM						
Modification:	Oct 05 2016 02:15 AM				×		
Description:	A user can provide answer quality feedback after asking a question.						
Priority:	Highest	High	✓ Medium	Low	I	_owest	
This Req. is Engir	neered From:	UF-H					
Justify why meeti	ng SF-H-01 can fulfilment of UF-H	Allows feedback to	be submitted.				
Traccability	Use cases cf.	UC-010					
Traceability:	Test cases cf.	TC-005					
Acknowledgment	Generated from the	Generated from the CapStone Process Management System ©2015					

Table 4.39. System NonFunctional Requirements: SP-03-01

Project Name:	Intelligent Academic Planner					
Requirement #:	SP-03-01			Туре	Functional	Non-Functional
Creation:	Oct 20 2016 01:53	AM		User		
Modification:	Oct 20 2016 01:54 AM			System		×
Description:	The system should provide an answer to a question within 5 seconds.			Product (sub-type below) Performance Requirements		
Priority:	Highest	High			_owest	
This Req. is Engineered From:		UP-03				
Justify why meeting SP-03-01 can contribute to the fulfilment of UP-03		Ensures an answer is quickly given by adding a performance requirement.				
Use cases cf.		NA NA				
Traceability:	Test cases cf.	TC-017				
Acknowledgment	Generated from the	rated from the CapStone Process Management System ©2015				

Table 4.40. System NonFunctional Requirements: SP-01-01

Project Name:	Intelligent Academic Planner						
Requirement #:	SP-01-01	SP-01-01			Functional	Non-Functional	
Creation:	Oct 05 2016 12:12	Oct 05 2016 12:12 AM					
Modification:	Oct 05 2016 12:14	Oct 05 2016 12:14 AM				×	
Description:	The system should only display information that the user			Product (sub-type below)			
	Knows is being disp	knows is being displayed.			Dependability/Reliability/Security		
Priority:	Highest	✓ High	Medium	Low Lowest			
This Req. is Engineered From:		UP-01					
Justify why meeting SP-01-01 can		Makes the user's profile more secure by allowing the user to specify which					
contribute to the fulfilment of UP-01		information is visible.					
Tracachility	Use cases cf.	NA					
Traceability:	Test cases cf.	TC-009					
Acknowledgment	Generated from the CapStone Process Management System ©2015						

Table 4.41. System NonFunctional Requirements: SO-01-01

Project Name: Intelligent Academic Planner							
Requirement #:	SO-01-01			Туре	Functional	Non-Functional	
Creation:	Sep 23 2016 12:42	Sep 23 2016 12:42 PM					
Modification:	Oct 20 2016 01:59	Oct 20 2016 01:59 AM					
5		log the upon out offer 1 hours of inactivity		Organizational (sub-type below)			
Description.	Description: The system should log the user out after 1 hour of inactivity.			Development Requirements			
Priority:	Highest	High	Medium	✓ Low Lowest			
This Req. is Engineered From:		UO-01					
Justify why meeti	ing SO-01-01 can fulfilment of UO-01	Ensures a user is not logged on for too long, managing their session.					
Use cases cf. N/A							
Traceability:	Test cases cf.	TC-024					
Acknowledgment	Generated from the CapStone Process Management System ©2015						

Table 4.42. Mapping from user requirements to system requirements

User Requirements		System Requirements		
Req ID	Description	Req ID	Description	
JF-A	A user can log in.	SF-A-01	The system should log-in a user within 5 seconds.	
JF-B	A user can log out.	SF-B-01	The system should log-out a user within 5 seconds.	
		SF-C-01	The system should conduct textual analyses.	
JF-C	A user can ask the system questions.	SF-C-04	The system should gather data unique to each user.	
JF-D	A user should receive multiple responses to a question.	SF-D-01	The system should show a minimum of 1 related search/question.	
UF-E	A user can create a profile	SF-E-01	The system should allow between 100 and 600 words to describe a user's academic and professional interests.	
		SF-E-02	The system should allow a user to submit 100 words of self-description about their personality.	
		SF-E-03	The system should allow a user to view their personality assessments.	
		SF-E-04	The system should create a personality assessment unique to each user based of the data gathered.	
		SF-E-05	The system should summarize this data to be used by an advisor directing the student.	
UF-F	A user can register	SF-F-01	The system should register the user within 5 seconds.	
JF-G	A user can view a log of asked questions.	SF-G-01	The system should allow users to send a list of asked questions to advisors	
JF-H	A user can provide information to improve accuracy of the system.	SF-H-01	A user can provide answer quality feedbarafter asking a question.	
JO-01	A user's session should be managed.	SO-01-01	The system should log the user out after hour of inactivity.	

Requirements: 15 / 16

Appendix R:	Requirements	Report
-------------	--------------	--------

CSSE-BD-Class 2017-003

UP-01	A user's profile should be secure.	SP-01-01	The system should only display information that the user knows is being displayed.	
UP-03	A user should receive a quick response after asking a question	SP-03-01	The system should provide an answer to a question within 5 seconds.	
Acknowledgment: Generated from the CapStone process management system ©2015				

Requirements: 16 / 16