### **Thomas Bowen - Unit Tests**

## The module and the functional testing:

In the sign up module: The function of creating an account

Inputs: Name: String, Email: String, Username: String, Password: Sring,

Password Confirmation: String, Age: boolean, Terms & Conditions: boolean.

### Forming equivalence classes:

Equ. Class	Description	Possible Values			
EC <sub>P, empty</sub>	No password provided	(())			
EC <sub>PC,empty</sub>	Password not confirmed	((2)			
$EC_{E,Empty}$	No email provided	(())			
$EC_{T,}$	Term and services not accepted	true/false			
EC <sub>E, (contains @)</sub>	Must be a valid email	"test@ucsc.edu"			
EC <sub>P&lt;6</sub>	Password is less than 6 characters	ASCII characters			
EC <sub>P, PC, Match</sub>	Passwords must match	ASCII characters			

### Derive test cases (for valid inputs):

Equ. Class	Input					<b>Expected Output</b>		
	Name	Email	User Name	Terms and Services	Password	Password Confirmation	Age	
$\begin{aligned} &EC_{P,\;empty},\\ &EC_{PC,empty}\\ &EC_{P<6}\\ &EC_{E,\;empty}\\ &EC_{E,(contain}\\ &_s @, EC_{T,}\\ &EC_{P,\;PC,}\\ &_{Match} \end{aligned}$	(())	"test @uscs .edu"	(())	True	"123456"	"123456"	true	Password = "123456" Password Confirmation = "123456" Terms and Services = true Name = "" Email = "test@ucsc.edut" UserName = "" Age = true

# Derive test cases (for invalid inputs):

Equ. Class	Input						<b>Expected Output</b>	
	Name	Email	User Name	Terms and Services	Password	Password Confirmation	Age	
EC <sub>T</sub>	((2)	"test @ucs c.edu"	((2))	false	"123456"	"123456"	true	ERROR
EC <sub>P, PC,</sub>	(())	"test @ucs c.edu"	(())	true	"123456"	123123"	true	ERROR
EC <sub>E,(contain</sub> s @)	(())	"test"	(677	true	"123456"	"123456"	true	ERROR
EC <sub>E, empty</sub>	(())	(67)	(677	true	"123456"	"123456"	true	ERROR
EC <sub>P&lt;6</sub>	((2)	"test @ucs c.edu"	6677	true	"123"	"123"	true	ERROR