

## ARMS INTERNSHIP PROGRAM

Week 1 (28 <sup>th</sup> May – 1 <sup>st</sup> June)		
	Front End Web Design and Development	Assumpta
	Graphics and User Interface Design - Creating of Visualizations using Photoshop and Prototyper	Assumpta
	HTML and CSS - HTML Syntax - Basic Elements, Advanced Elements - CSS Syntax	Assumpta
	Project 1: Mockup to Article	
Week 2 (4 <sup>th</sup> June – 8 <sup>th</sup> June)		
	Project 1: Presentations	
	Extra: Coding Principles - Faster Coding	Alvin
	Extra: Community - Slack - Trello	Alvin & Assumpta
	JavaScript: - Intro to JavaScript - Datatypes, Variables, Operators, Conditionals, Functions, Loops	Assumpta
	Assignment 1	
Week 3 (11 <sup>th</sup> June – 15 <sup>th</sup> June)		
	Assignment 1: Presentations	
	JavaScript - Arrays, Objects, DOM, \$, Selectors - jQuery	Assumpta
	Project 2	
	Responsive Design	Assumpta
	Extra: Coding principles - Version Control	Alvin
Week 4 (18 <sup>th</sup> June – 22 <sup>nd</sup> June)		
	Project 2: Presentations	
	Introduction to Backend Development - Backend? - CLI and Terminal Overview - Databases & CRUD	Alvin
	Python Basics: - Installation/ Setup, - Numbers, Strings, Lists, Dictionaries, Tuples, Sets and Booleans - Exercise - Control Flow, Functions	Alvin

	Project 3: Simple Game	Alvin
<b>Week 5 (25<sup>th</sup> June – 29<sup>th</sup> June)</b>		
	Project 3: Presentations	
	Python Advanced <ul style="list-style-type: none"> <li>- OOP Basics, Errors &amp; Exceptions, Regular Expressions, Modules &amp; Packages, Decorators, Name &amp; Main, Python for File Systems</li> <li>- CSV &amp; JSON</li> </ul>	Alvin  Alvin
	Project 4	
<b>Week 6 (2<sup>nd</sup> July – 6<sup>th</sup> July)</b>		
	Project 4: Presentations	
	Django Framework Basics <ul style="list-style-type: none"> <li>- Setup, Django App, Views, Django Admin, URL Mappings, Templates, Exercise, Static Files, Model Administration</li> </ul>	Alvin
	Django Advanced 1: <ul style="list-style-type: none"> <li>- Django Auth, Social Auth, CBV</li> </ul>	Alvin
	Assignment 2	
<b>Week 7 (9<sup>th</sup> July – 13<sup>th</sup> July)</b>		
	Assignment 2: Presentations	
	Django Advanced 2: <ul style="list-style-type: none"> <li>- ORM, Forms, Django REST Framework</li> <li>- Deploying Django: Python Anywhere, Heroku, AWS, VPS with Digital Ocean</li> </ul>	Alvin
	Project 5: Wrapping it All Up!	
<b>Week 8 (16<sup>th</sup> July – 20<sup>th</sup> July)</b>		
	Data Science Principles <ul style="list-style-type: none"> <li>- Intro to data science and Machine Learning</li> <li>- Intro to neural networks</li> <li>- Let's build a Simple AI</li> </ul>	Alvin K & Alvin A
	Virtual Learning and VR	
	IoT and Web development <ul style="list-style-type: none"> <li>- The Internet of Things</li> <li>- Demo with Web</li> <li>- The Future of Web in IoT</li> </ul>	Alvin
	Project Management <ul style="list-style-type: none"> <li>- Principles of Project Management in Software Dev</li> <li>- Guest Speaker</li> </ul>	Alvin K & Brian T
<b>Week 9 (23<sup>rd</sup> July – 27<sup>th</sup> July)</b>		
	Project 5 Presentations	
	Closing Ceremony	