



Jose Rizal University
College of Computer Studies Engineering
Computer Engineering Department

Outreach Report

CPE C409 – SEMINARS AND FIELDTRIPS

Submitted by:

Exiquiel John A. Pines

Submitted to:

Engr. Monette Loy-A

Date Submitted:

November 17, 2023

Beneficiary / Hosting Institution: Grade 12 Students of Jose Rizal University

Outreach Date and Venue: November 06, 2023 – Mandaluyong City

Outreach Title: Arduino Programming: (Arduino for Beginners)

Attendance of Group Members



Attendance Sheet

Timestamp	Email Address	Surname	Given Name	Middle Initial	Strand	Section	Email
11/6/2023 9:00:42	angelah.manikis@my.jru.edu	Manikis	Angelah	L	STEM	E12G	angelah.manikis@my.jru.edu
11/6/2023 9:01:25	haideisabel.roque@my.jru.edu	Roque	Haide Isabel	P	STEM	E12G	haideisabel.roque@my.jru.edu
11/6/2023 9:04:14	alexandra.bella@my.jru.edu	Bella	Alexandra	T.	STEM	E12G	alexandra.bella@my.jru.edu
11/6/2023 9:09:10	mariamisabelle.bual@my.jru.edu	Bual	Mariam Isabelle	H.	STEM	E12G	mariamisabelle.bual@my.jru.edu
11/6/2023 9:18:32	charlynjoy.rodriguez@my.jru.edu	Rodriguez	Charlyn Joy	V.	STEM	E12G	charlynjoy.rodriguez@my.jru.edu
11/6/2023 9:26:44	josephrafael.belena@my.jru.edu	Belena	Joseph Rafael	D	STEM	E12G	josephrafael.belena@my.jru.edu
11/6/2023 9:28:46	triksonjames.rombaoa@my.jru.edu	Rombaoa	Trikson James	M	STEM	E12G	triksonjames.rombaoa@my.jru.edu
11/6/2023 9:32:23	kryshafaymesophia.tanaleon@my.jru.edu	Tanaleon	Krysha	D.	STEM	E12G	kryshafaymesophia.tanaleon@my.jru.edu
11/6/2023 9:34:45	felixjorge.sagadraca@my.jru.edu	Sagadraca	Felix Jorge	D.	STEM	E11G	felixjorge.sagadraca@my.jru.edu
11/6/2023 9:36:20	julianasophia.pana@my.jru.edu	Paña	Juliana	S.	STEM	E12G	julianasophia.pana@my.jru.edu
11/6/2023 9:36:37	cristinejaze.panganiban@my.jru.edu	Panganiban	Cristine Jaze	J.	STEM	E12G	cristinejaze.panganiban@my.jru.edu
11/6/2023 9:41:13	keishamaramae.candari@my.jru.edu	Candari	Keisha Mara Mae	A	STEM	E12G	keishamaramae.candari@my.jru.edu
11/6/2023 9:42:15	zheind.oroifo@my.jru.edu	oroifo	Zheind Venice	N/A	STEM	E12G	zheind.oroifo@my.jru.edu
11/6/2023 10:01:11	brentalessandro.bautista@my.jru.edu	Bautista	Brent Alessandro	R	STEM	E12G	brentalessandro.bautista@my.jru.edu
11/6/2023 10:02:49	jhonford.menoza@my.jru.edu	Meñoza	Jhon Ford	B.	STEM	STEM-E12G	jhonfordmenoza56@gmail.com
11/6/2023 10:08:13	mariacathlyn.valerio@my.jru.edu	Valerio	Maria Cathlyn	Paradero	STEM	E12G	mariacathlyn.valerio@my.jru.edu
11/6/2023 10:12:50	joemvince.guillermo@my.jru.edu	Guillermo	Joem Vince	Perez	STEM	E12G	joemvince.guillermo@my.jru.edu
11/6/2023 10:13:10	chadrussel.saldariega@my.jru.edu	Saldariega	Chad Russel	.	STEM	E12g	Chadrussel.saldariega@my.jru.edu
11/6/2023 10:19:34	aidan.tuano@my.jru.edu	Tuaño	Aidan	C.	STEM	E12G	aidan.tuano@my.jru.edu
11/6/2023 10:25:01	farrell.roble@my.jru.edu	Roble	Farrell	Reyes	STEM	E12G	Farrell.roble@my.jru.edu
11/6/2023 10:25:52	ceska.flores@my.jru.edu	Flores	Ceska	Salvador	STEM	G	ceska.flores@my.jru.edu
11/6/2023 10:29:07	micaelamay.quilla@my.jru.edu	Quilla	Micaela May	Nagaño	STEM	E12G	micaelamay.quilla@my.jru.edu
11/6/2023 10:32:18	ashley.caringal@my.jru.edu	Caringal	Ashley	Gaygay	STEM	E12G	ashley.caringal@my.jru.edu
11/6/2023 10:33:49	drewkirstein.tigla@my.jru.edu	Tigla	Drew Kirstein	Leona	STEM	E12G	drewkirstein.tigla@my.jru.edu
11/6/2023 10:40:01	kenthbernard.eledia@my.jru.edu	Eledia	Kenth Bernard	Daos	STEM	E12G	kenthbernard.eledia@my.jru.edu
11/6/2023 11:16:23	chloemae.martillana@my.jru.edu	Martillana	Chloe	D.	STEM	E12G	chloemae.martillana@my.jru.edu
11/6/2023 11:59:30	jacobkamal.okla@my.jru.edu	Okla	Jacob Kamal Al	Villorente	STEM	E12G	jacobkamal.okla@my.jru.edu
11/6/2023 13:42:35	elyzavea.reyes@my.jru.edu	Reyes	Elyza Vea	Mangaring	STEM	B	elyzavea.reyes@my.jru.edu
11/6/2023 13:42:41	russelan.payos@my.jru.edu	Payos	Russel An	G.	STEM	E12B	russelan.payos@my.jru.edu
11/6/2023 13:43:05	rebeccabeatriz.urbiztondo@my.jru.edu	Urbiztondo	Rebecca Beatriz	Fabian	STEM	E12B	rebeccabeatriz.urbiztondo@my.jru.edu
11/6/2023 13:43:21	jonwensy.villanueva@my.jru.edu	Villanueva	Jon Wensy	Lajaeca	STEM	E12B	jonwensy.villanueva@my.jru.edu
11/6/2023 13:43:23	allainekirsten.dizon@my.jru.edu	Dizon	Allaine Kirsten	DL	STEM	E12B	allainekirsten.dizon@my.jru.edu
11/6/2023 13:43:41	isabell.latagan@my.jru.edu	Latagan	Isabelli	L.	STEM	E12B	issalatagan@gmail.com
11/6/2023 13:43:45	gablorenz.orendain@my.jru.edu	Orendain	Gablorenz	Ve	STEM	E12B	gablorenz.orendain@my.jru.edu
11/6/2023 13:43:45	adrianemitchel.marteja@my.jru.edu	Marteja	Adriane Mitchel	E.	STEM	E12B	adrianemitchel.marteja@my.jru.edu

Timestamp	Email Address	Surname	Given Name	Middle Initial	Strand	Section	Email
11/6/2023 13:43:46	justinecarl.serrano@my.jru.edu	Serrano	Justine Carl	Roxas	STEM	E12B	tine.serrano1010@gmail.com
11/6/2023 13:43:51	ronalhyn.lozada@my.jru.edu	Lozada	Rona Lhyn	M.	STEM	E12B	ronalhyn.lozada@my.jru.edu
11/6/2023 13:43:57	alanedgar.consebido@my.jru.edu	Consebido	Alan Edgar	F.	STEM	E12B	alanedgarfrescoconsebido@gmail.com
11/6/2023 13:43:59	jillianprincess.viola@my.jru.edu	Viola	Jillian Princess	P.	STEM	E12B	jillianprincess.viola@my.jru.edu
11/6/2023 13:44:02	abegailgay.tiare@my.jru.edu	Tiare	Abegail Gay	L.	STEM	E12B	abegailgay.tiare@my.jru.edu
11/6/2023 13:44:03	princessjanneah.matta@my.jru.edu	Matta	Princess Janneah	R	STEM	E12B	princessjanneah.matta@my.jru.edu
11/6/2023 13:44:07	abigaildenise.natividad@my.jru.edu	Natividad	Abigail Denise	K	STEM	E12B	abigaildenise.natividad@my.jru.edu
11/6/2023 13:44:10	vincedion.fernando@my.jru.edu	Fernando	Vince Dion	L.	STEM	E12B	vincedion.fernando@my.jru.edu
11/6/2023 13:44:15	ashley.vinas@my.jru.edu	Viñas	Ashley	Braza	STEM	E12B	ashley.vinas@my.jru.edu
11/6/2023 13:44:30	loredede.pano@my.jru.edu	Pano	Loredee	A.	STEM	12-B	loredede.pano@my.jru.edu
11/6/2023 13:44:39	shen.cancan@my.jru.edu	Cancan	Shen	H.	STEM	E12B	shen.cancan@my.jru.edu
11/6/2023 13:44:42	angelnicole.collado@my.jru.edu	Collado	Angel Nicole	M	STEM	E12B	angelnicole.collado@my.jru.edu
11/6/2023 13:44:45	ellamae.agtarap@my.jru.edu	Agtarap	Ella Mae	D.	STEM	E12B	ellamae.agtarap@my.jru.edu
11/6/2023 13:44:57	azhlee.pabellano@my.jru.edu	Pabellano	Azhlee	N/A	STEM	E12B	azhlee.pabellano@my.jru.edu
11/6/2023 13:45:11	angelaneomi.amido@my.jru.edu	Amido	Angela Neomi	N	STEM	E12B	angelaneomi.amido@my.jru.edu
11/6/2023 13:45:13	justinedaniel.pineda@my.jru.edu	Pineda	Justine Daniel	Tongol	STEM	E12B	justinedaniel.pineda@my.jru.edu
11/6/2023 13:45:20	maridadarilou.pagulong@my.jru.edu	Pagulong	Maria Darilou	G	STEM	E12B	maridadarilou.pagulong@my.jru.edu
11/6/2023 13:45:23	nikeaasya.villahermosa@my.jru.edu	Villahermosa	Nikea Asya	P.	STEM	E12B	nikeaasya.villahermosa@my.jru.edu
11/6/2023 13:45:26	allanjohn.bacusa@my.jru.edu	Bacusa	Allan John	R	STEM	E12B	allanjohn.bacusa@my.jru.edu
11/6/2023 13:45:27	christiandarryl.vasquez@my.jru.edu	Vasquez	Christian Darryl	A.	STEM	B	christiandarryl.vasquez@my.jru.edu
11/6/2023 13:45:37	justineaaron.roque@my.jru.edu	Roque	Justine Aaron	Padilla	STEM	E12B	justineaaron.roque@my.jru.edu
11/6/2023 13:45:46	josabell.multo@my.jru.edu	Multo	Josabell	Castor	STEM	E11B	josabell.multo@my.jru.edu
11/6/2023 13:45:52	angelinaysabel.flores@my.jru.edu	Flores	Angelina Ysabel	S	STEM	E12B	angelinaysabel.flores@my.jru.edu
11/6/2023 13:46:31	lawrencegiles.garcia@my.jru.edu	Garcia	Lawrence Giles	C.	STEM	E12B	lawrencegiles.garcia@gmail.com
11/6/2023 13:47:08	nicolleejasmine.alamis@my.jru.edu	Alamis	Nicollee Jasmine	Tejada	STEM	E12B	nicolleejasmine.alamis@my.jru.edu
11/6/2023 13:47:18	gerome.cernitchev@my.jru.edu	Cernitchev	Gerome	P.	STEM	E12B	gerome.cernitchev@my.jru.edu
11/6/2023 13:48:01	frank.cinco@my.jru.edu	Cinco	Frank Jr	Bulanadi	STEM	12b	Fjrjrbulanadi@gmail.com
11/6/2023 13:48:01	jadeangelou.llamas@my.jru.edu	Llamas	Jade Angelou	S.	STEM	E12B	jadeangelou.llamas@my.jru.edu
11/6/2023 13:49:32	colyne.dulay@my.jru.edu	Dulay	Colyne	Amarillento	STEM	E12B	Colyne.dulay@my.jru.edu
11/6/2023 20:08:40	samueljullius.varias@my.jru.edu	Varias	Samuel Julius	P.	STEM	E12G	samueljullius.varias@my.jru.edu

The Seminar

Our outreach seminar, titled "Arduino Programming: (Arduino for Beginners)," was successfully conducted at Jose Rizal University, Mandaluyong City, on November 6, 2023.

The decision to focus on Arduino programming stemmed from our realization that it would be the most beneficial and impactful topic for senior high school students aspiring to enter the field of computer engineering. Recognizing its significance in building a solid foundation for future endeavors, we believed that imparting Arduino programming skills would empower students to explore their creative potential and develop the technical expertise necessary for success in the field.

The seminar commenced with an exploration of the fundamental components of Arduino, shedding light on their paramount importance in the realm of electronics. We delved into the intricacies of various Arduino boards, highlighting their unique features and capabilities. This foundational knowledge, we believed, would lay the groundwork for an understanding of the broader field of computer engineering.

Moving forward, we seamlessly transitioned into the heart of our seminar—Arduino programming essentials. Our objective was to demystify the seemingly complex world of programming for the students. We introduced them to the Arduino Integrated Development Environment (IDE), an accessible platform tailored for Arduino projects. Furthermore, we embarked on a detailed exploration of the syntax and framework of the Arduino programming language. By doing so, we aimed to equip the students not just with knowledge but with the confidence to navigate and create within the Arduino coding landscape.

The crux of our seminar lay in the hands-on experience we provided. Recognizing the importance of practical application, we guided the participants through exercises using both physical Arduino boards and TinkerCAD, a virtual prototyping tool. This segment was more than just a technical exercise; it was an opportunity for the students to immerse themselves in the design of complex circuits and witness their creations come to life in a virtual setting. Real-world examples further illuminated the potential applications of Arduino programming, bridging the gap between theoretical understanding and practical implementation.

The impact of our seminar extended beyond the transfer of technical knowledge. We fostered an active and comfortable atmosphere, encouraging students to explore their creative potential. By providing them with the tools and skills needed for success in the field, we hoped to instill a sense of empowerment and inspiration. Our aim was not merely to teach Arduino programming but to sow the seeds of curiosity and passion for computer engineering.

Our seminar successfully provided senior high school students with a solid introduction to Arduino programming, instilling in them the courage to embark on their electronic projects. The hands-on approach, coupled with real-world examples, created an active and comfortable learning atmosphere, fostering engagement and inspiration among the participants.

Your Thoughts

The seminar, initially scheduled for October 17, 2023, was rescheduled to provide our group with additional time to prepare adequately. Given the short preparation time and concurrent academic commitments, our group faced challenges in organizing the seminar effectively. The rescheduling to November 6, 2023, provided a crucial extension, allowing us to prepare materials thoroughly and study the topic in-depth. This extra time proved invaluable in ensuring the quality of our presentation and the relevance of the content to our target audience.

The primary objective of our seminar was to inspire and encourage senior high school students to consider a career in computer engineering by providing them with a comprehensive introduction to Arduino programming. We aimed to equip them with foundational knowledge and hands-on skills essential for pursuing a career in this field.

In conclusion, the rescheduled seminar allowed our group to overcome initial challenges and deliver a comprehensive and impactful presentation on Arduino programming. We believe that our efforts have contributed to inspiring the next generation of computer engineers, providing them with the knowledge and skills necessary for success in the field.

Pictures

