IN PARTNERSHIP WITH PLYMOUTH UNIVERSITY

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Module Code: SOFT255SL	Module Name: Software Engineering for the Internet using Java
Coursework Title: University industry collaboration platform using JavaEE	
Deadline Date: 8th April 2019	Member of staff responsible for coursework: Mr. Chaminda Wijesinghe
Programme: BSc (hons) Software Engineering	

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Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.

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We confirm that we have read and understood the Plymouth University regulations relating to Assessment Offences and that we are aware of the possible penalties for any breach of these regulations. We confirm that this is the independent work of the group.

Signed on behalf of the group: K.C.A.A Iroshan

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Signed :

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*Please delete as appropriateSci/ps/d:/students/cwkfrontcover/2013/14

Acknowledgement

We expressed our gratitude to Mr. Chaminda Wijesinghe, our humble lecturer and the module leader of Software Engineering for the internet using java (Term II), for the enormous help and guidance we received in completion of this project and the module. Secondly, we should express our gratitude Mrs. Sulari Fernando, lecturer and the module leader of Software Engineering for the internet using java (Term I), for the proper guidance and the foundation that has been laid.

We would also like to extend our special thanks to all the lecturers and our dearest colleagues of NSBM for their immense support and motivation thought our studies.

Finally, we would like to express our heartfelt affection to all those people who have been helpful and supportive thought the successful completion of the project.

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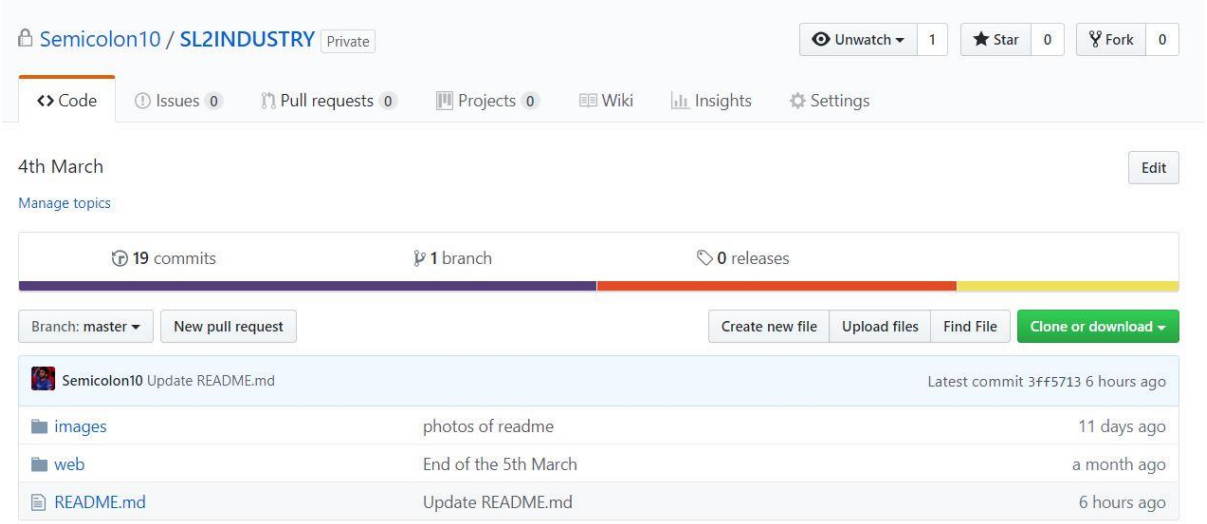
1.How we collaborated

We used git version control system with the GitHub platform and collaborated virtually as well as physically.

Project link: https://github.com/Semicolon10/SL2INDUSTRY



githubContribution-Figure 1

2. SL 2 INDUSTRY

In Sri Lanka university industry collaboration is only limited to industry talks, workshops and guest lectures. That also only limited to urban universities in the island. Strong collaboration among the society is a way to develop this country. So, in this small island why we can't be getting together and lift the community and country as well. **SL 2 INDUSTRY** is the platform we built for fill this gap. Through this platform the provided collaboration can be vary as follows,

I. Research collaboration:

Research collaboration is one among that and industries can upload problems to be solved and University students can take over these as their final research projects and deliver it with the mentoring of industry and with the academic supervisor. Students also can upload their queries that need support from the industry to be solved.

For example, in industry there are professionals who willing to do research but have no time. In universities there are undergraduates who like to do research but don't have mentorship. We are filling this gap between university and industry using this platform.

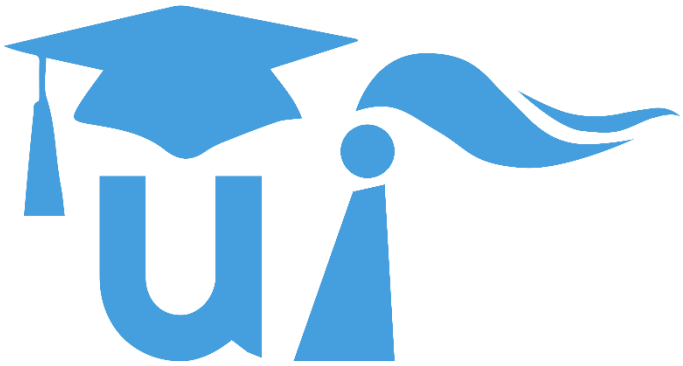
II. Career collaboration:

University can share the academic calendar which include some important dates such as when students will be ready for interns and employment. Industry can share internship/job opportunities they have with particular university. When students will get academic breaks. Such information will be useful for students and industry as well.

III. Event collaboration:

Some annual events organized by different industries can be made visible to universities and students can prepare for such events well in advance. This may be meet ups, Competitions or hackathons or any other matter that can be done in a collaborative way. This may be same the annual events organized by universities and expecting other universities to participate, and industries can sponsor for such important events.

a. Logo Story



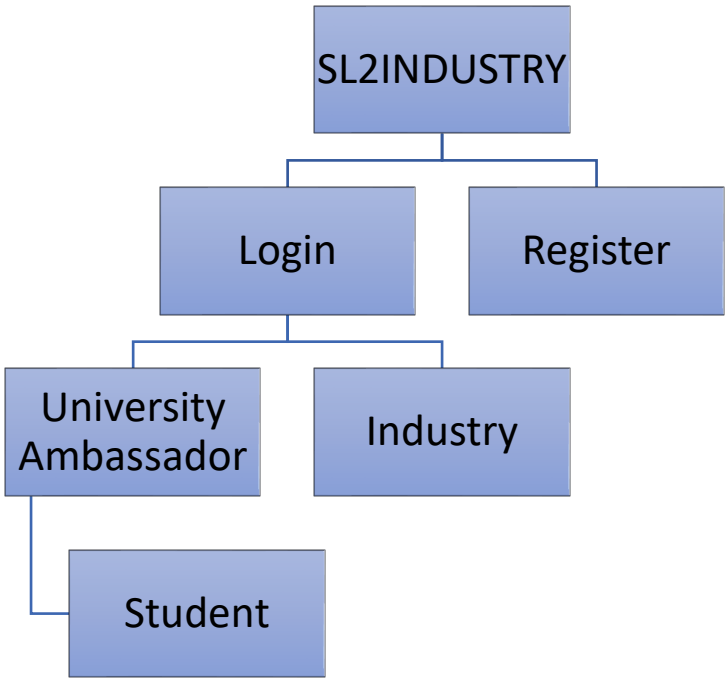
logo-Figure 1

This is not a just another random logo. We created customized logo using photoshop. It has unique definition,

- *An academic cap on top of the letter U indicated undergraduate student*
- *Letter I indicate the Industry*
- *The flame on top of the letter I indicates the power*

"*University industry collaboration will be the power of future*"

b. User Story



Userstory-Figure 2

3. Analysis of the system

3.1. Users of The System

I. Industry Coordinator: person who is represent particular company. There can be multiple coordinators from each company.

II. University Ambassador: student who is representing particular university. There is only one ambassador for one university. Ambassadors are selected by google form annually.

III. University Student: undergraduates of universities. They have their own personal accounts with categorizing into universities, but they have very limited privileges to do their own. All student's actions are going through the ambassador.

IV. People: anyone can visit the webpage and see public events and posts but to make an account it's must to have an email address which is provided by your university.

3.2. Used Technologies

I. Java Server Phase (**JSP**): JSP is a technology we use to crete dynamically generated web pages based on HTML, XML.

II. **MVC** design pattern: MVC design pattern to breakdown development process into 3 tires,
Presentation layer: we create **views** to create UI
Logical layer: we use **controllers** to process
Database layer: we use **models** to connect with database and handle data
By using this we can reduce our workload and make the development process easy and more convenient.

III. MySQL: we use MySQL to store and fetch the data.

IV. JavaScript/ CSS/ HTML/ Bootstrap/ jQuery: used for frontend designing

3.3. Expected Benefits of the System

I. University students:

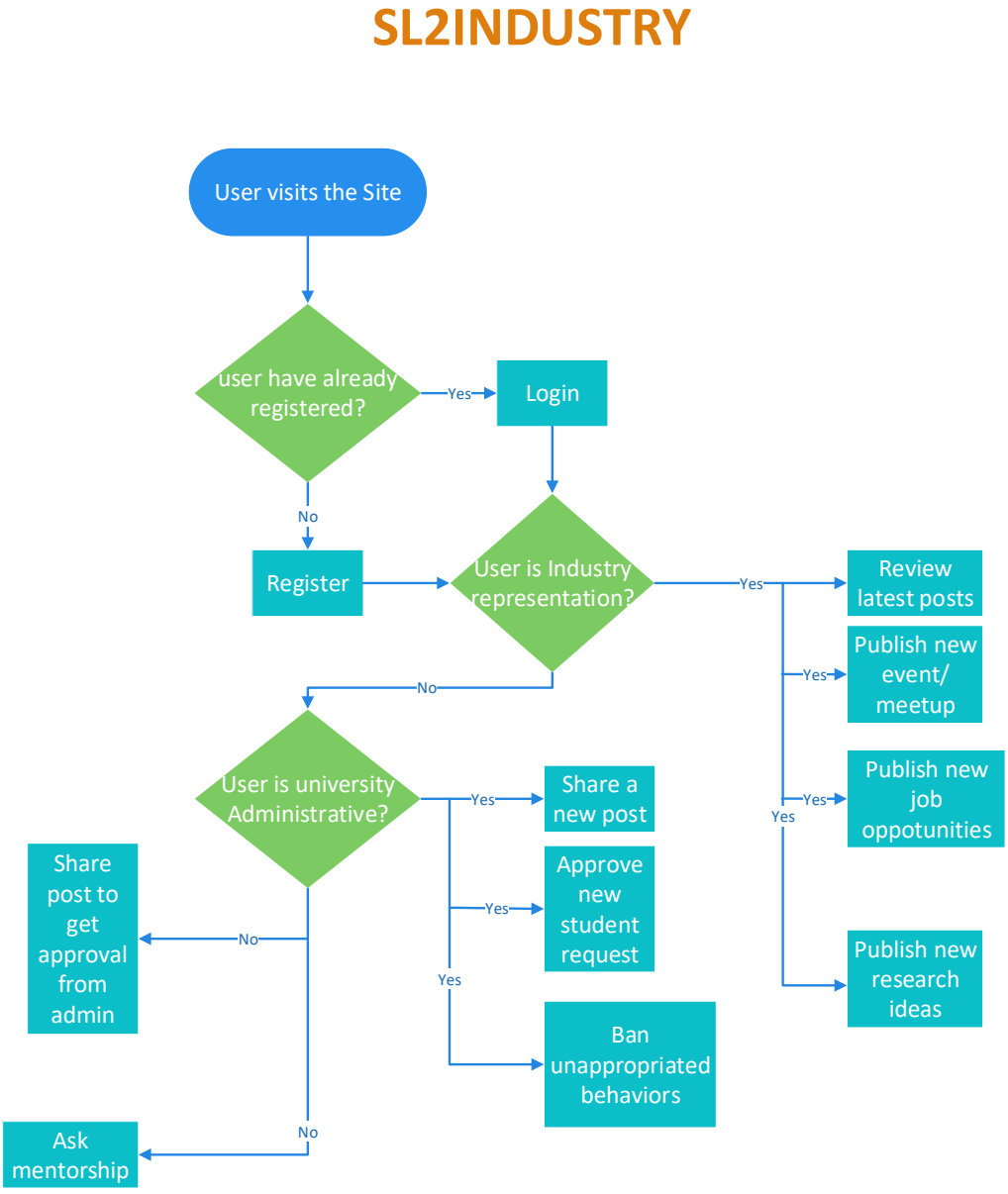
- Networking: Undergraduate students can network with professional people which will be helpful for built-up their career.
- This is the best platform to do your research studies with the mentorship of professional people.
- Platform for host university meetups, events.
- Find meetups, events which are available in other universities.
- Find speakers for the university meetups, events.
- Share your ideas with professionals.
- Find job, internship opportunities.

II. Industry

- If you have busy schedule you can make your ideas implement with the help of university students.
- Platform for host industry meetups, tech-talks, events, conferences.
- Marketing their products among university students.

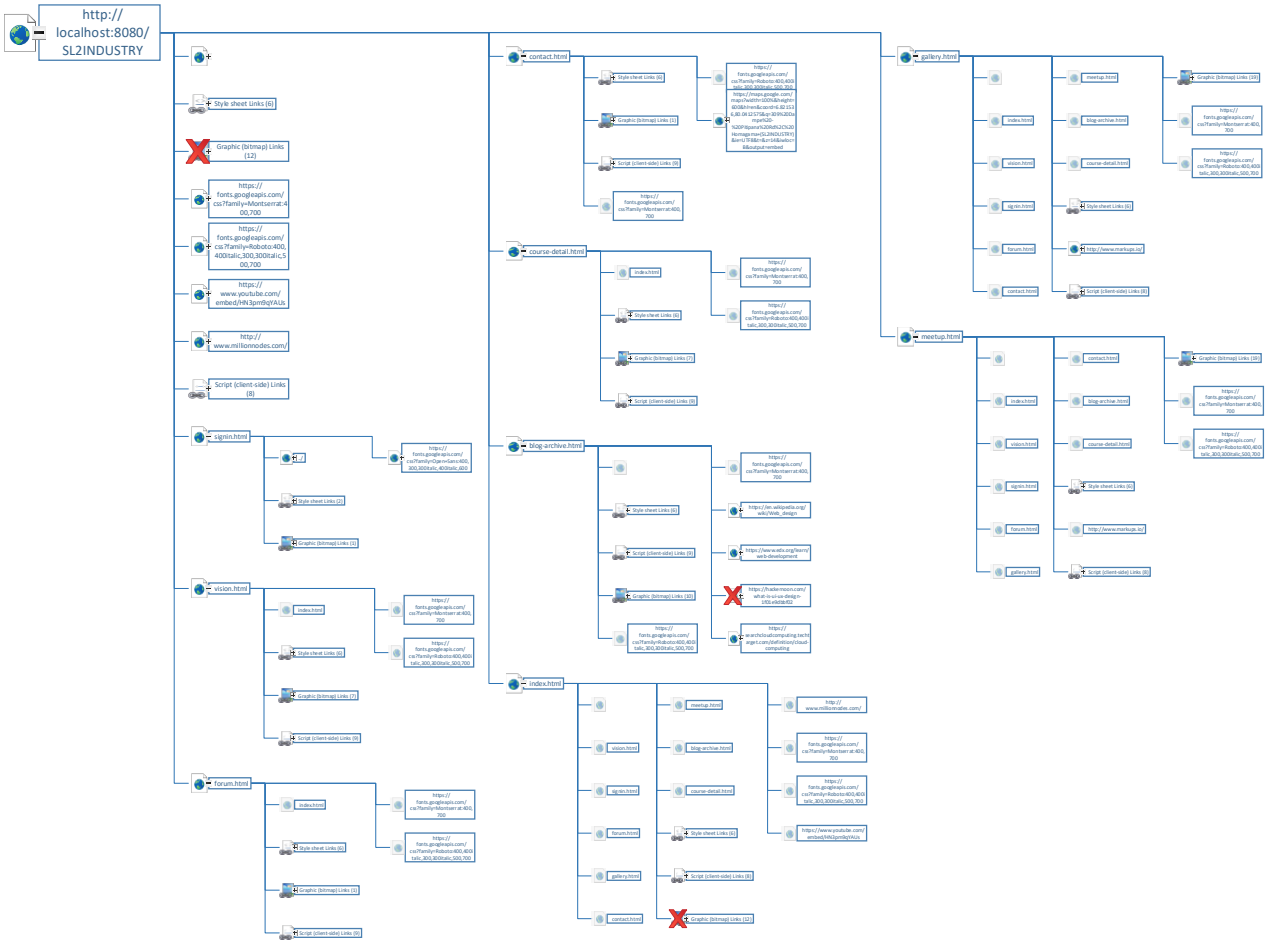
4. System Design & Development

a. Basic Flowchart of The Site



flowchart-Figure 3

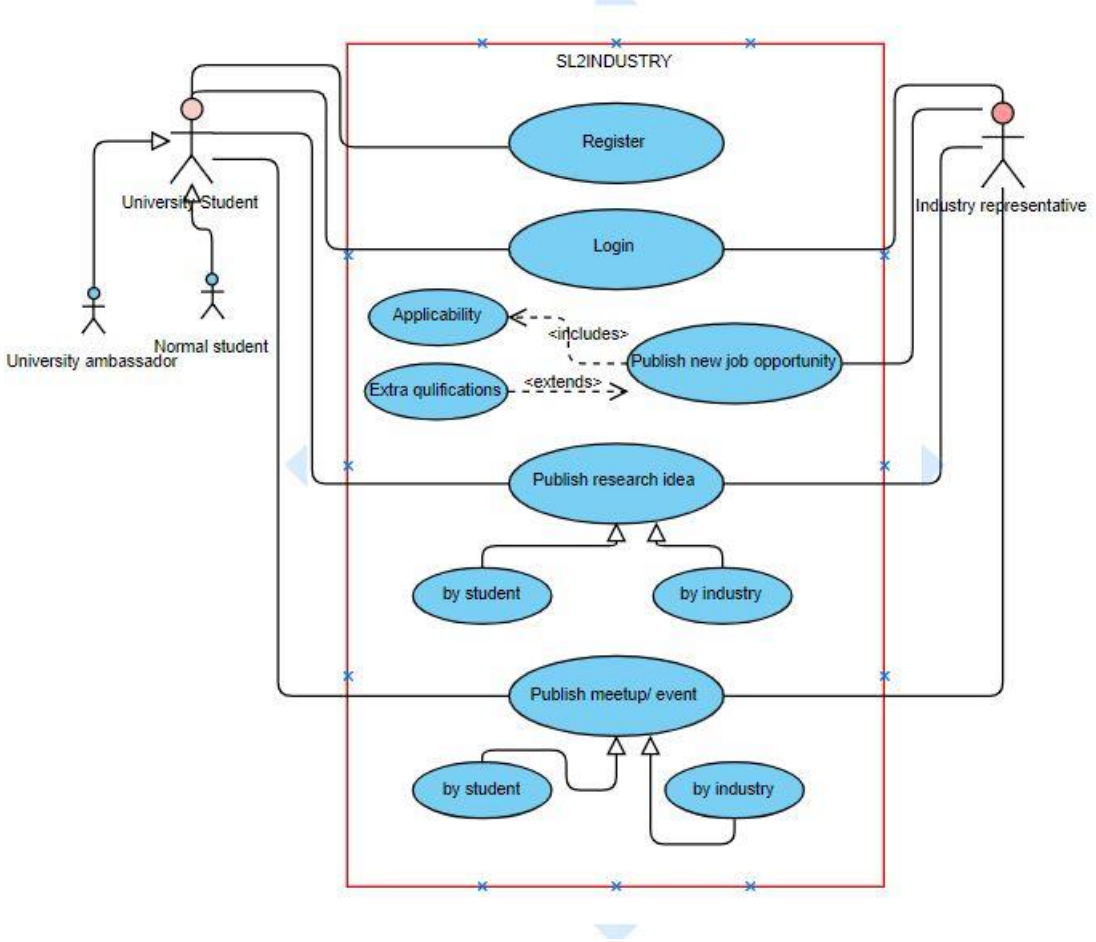
b. Website Map using Visio



websitemap-Figure 4

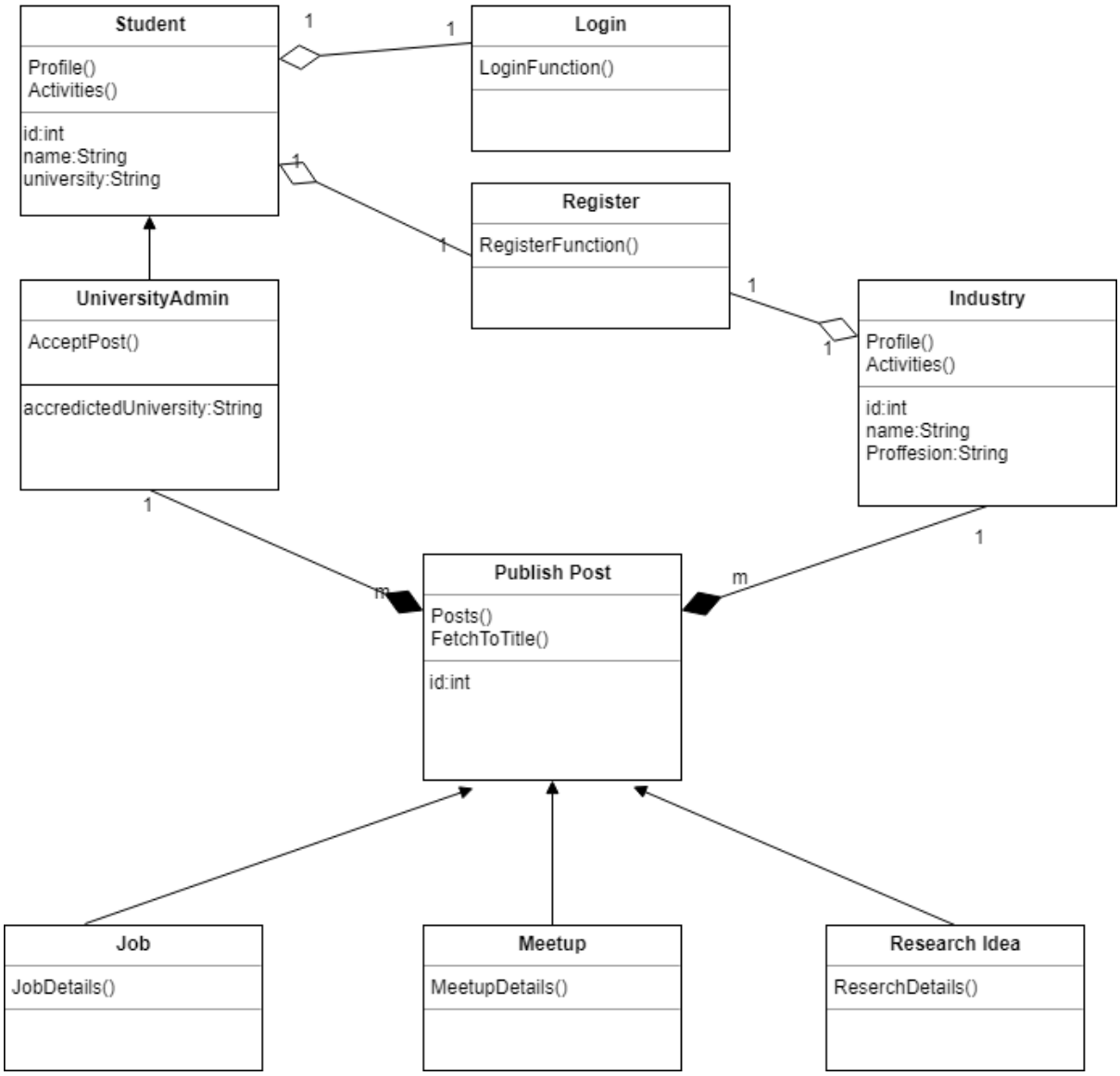
4.3. UML Diagrams

I. Use case diagram:



usecase-Figure 5

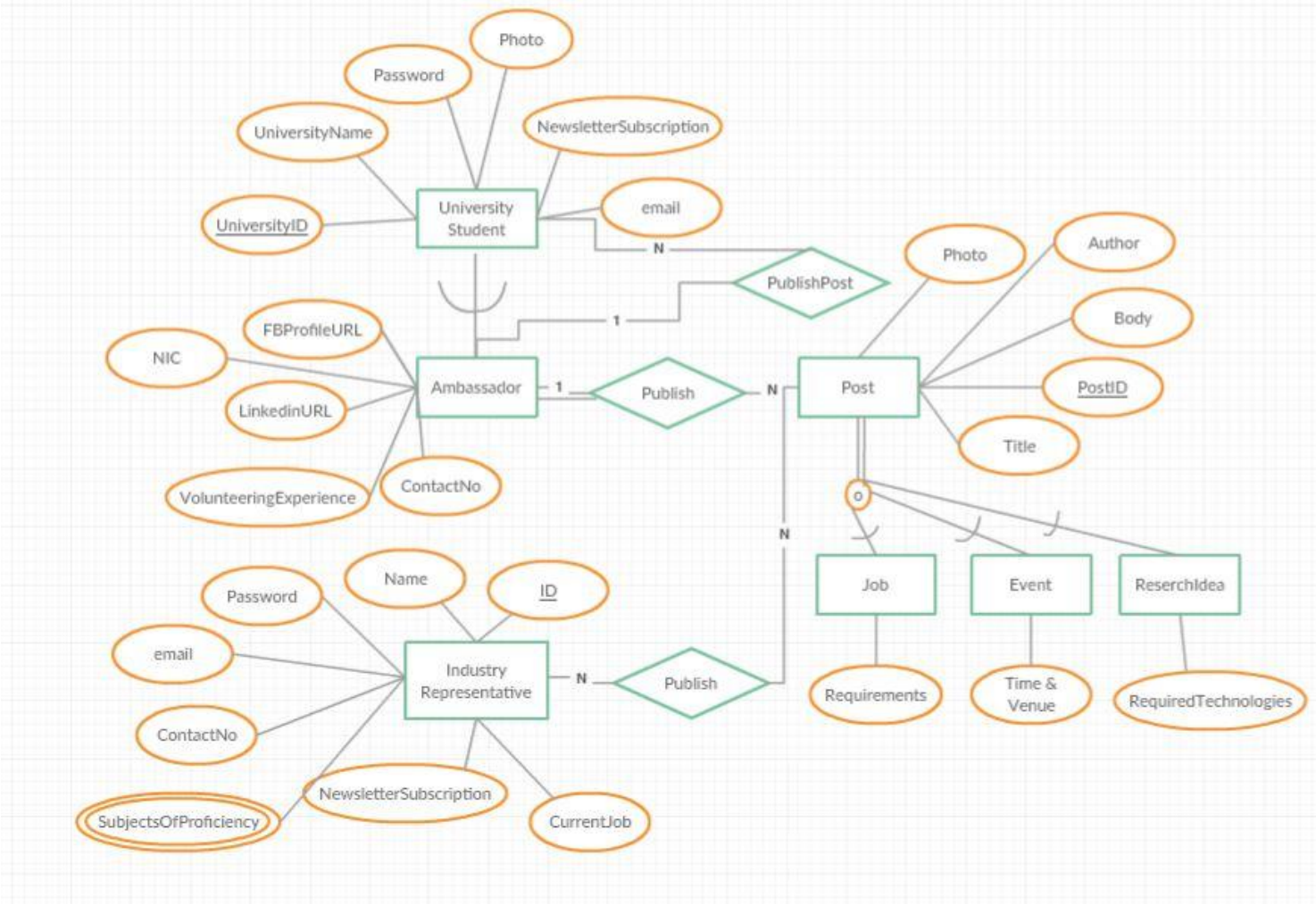
II. Basic Class diagram:



Classduagram-Figure 6

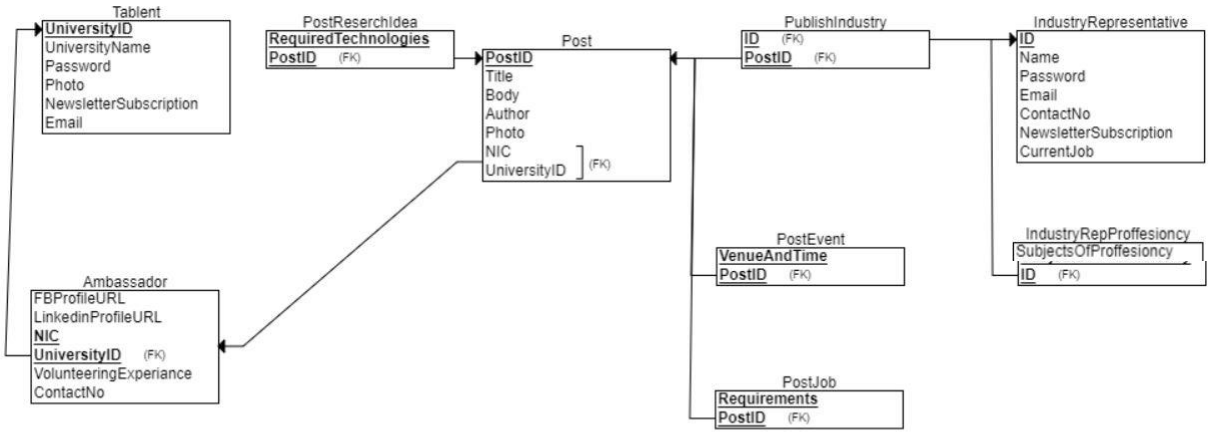
4.4. Database Diagrams

I. Enhanced ER(EER) Diagram:



Eer-Figure 7

II. Relational Schema:



Relationalschema-Figure 8

4.5. Screenshots of GUI Design

header

Menu-bar

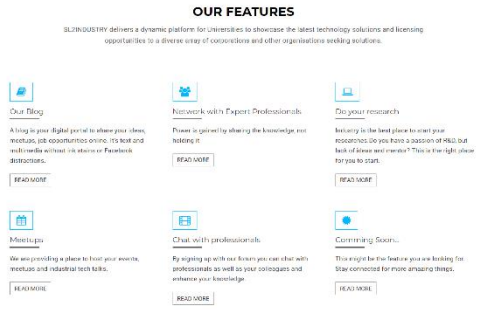
slider

logo

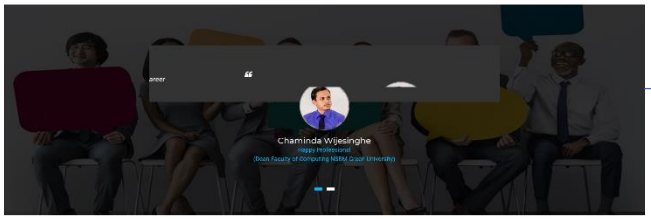
services

About-us section

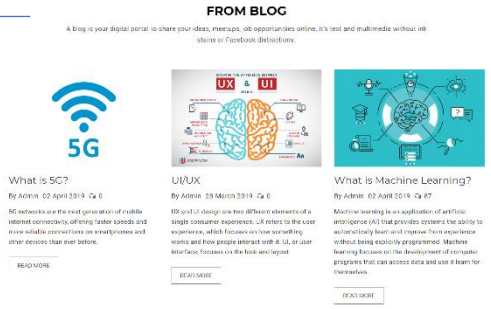
counter



Our features

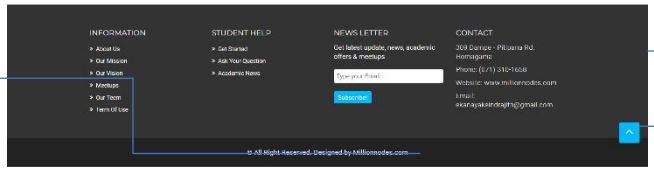


suggestions & opinions



Resant blog posts

Footer-top

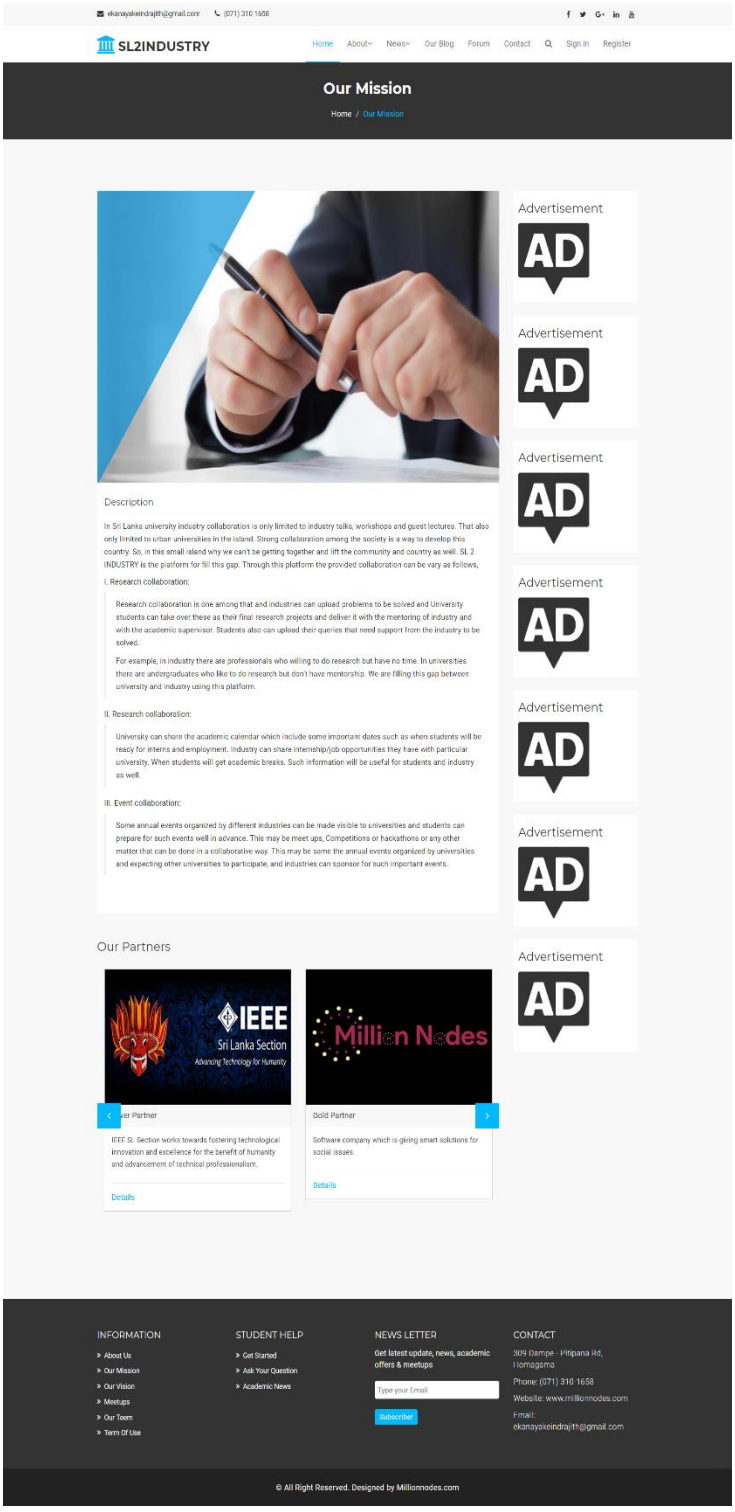


copyright

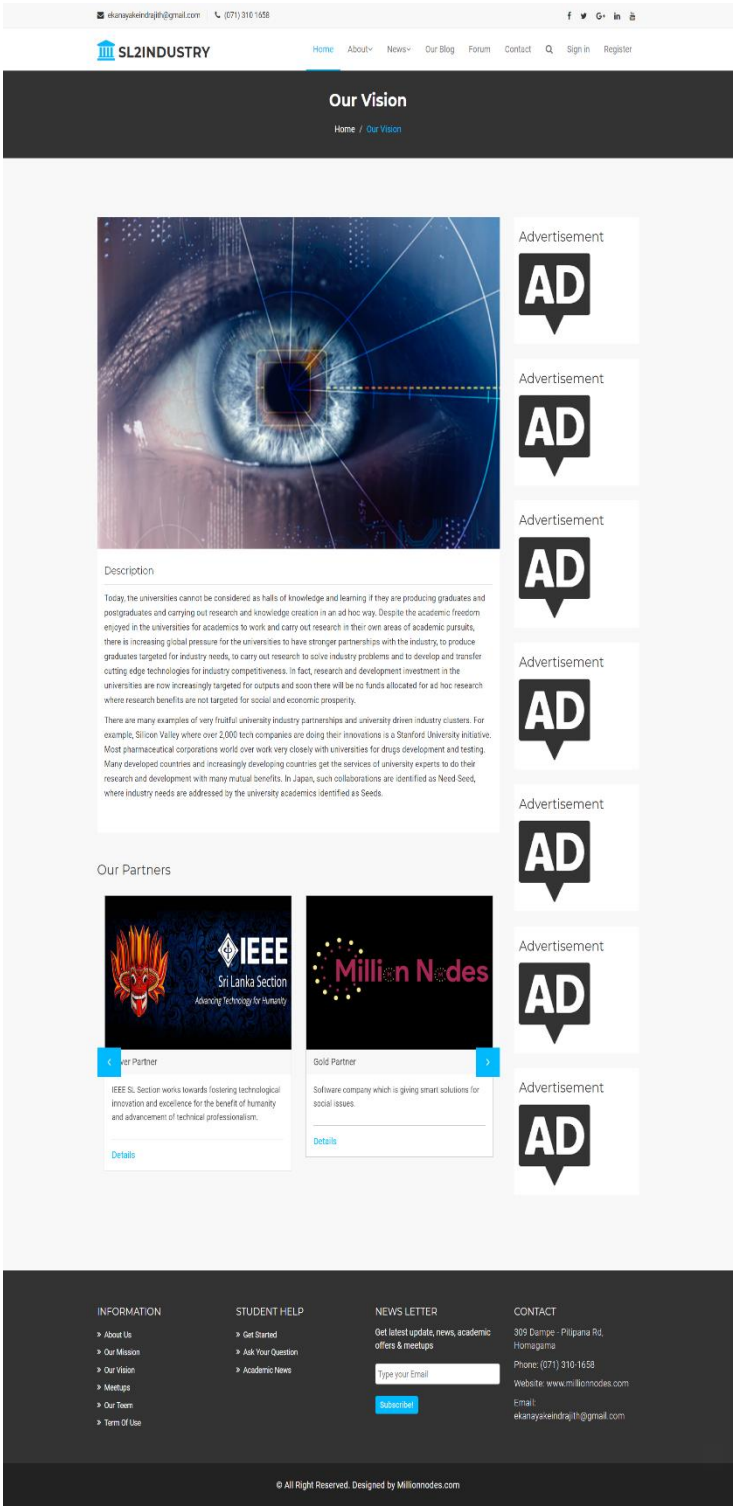
Scroll-top button

Screenshot1-Figure 9

Our vision and mission pages:

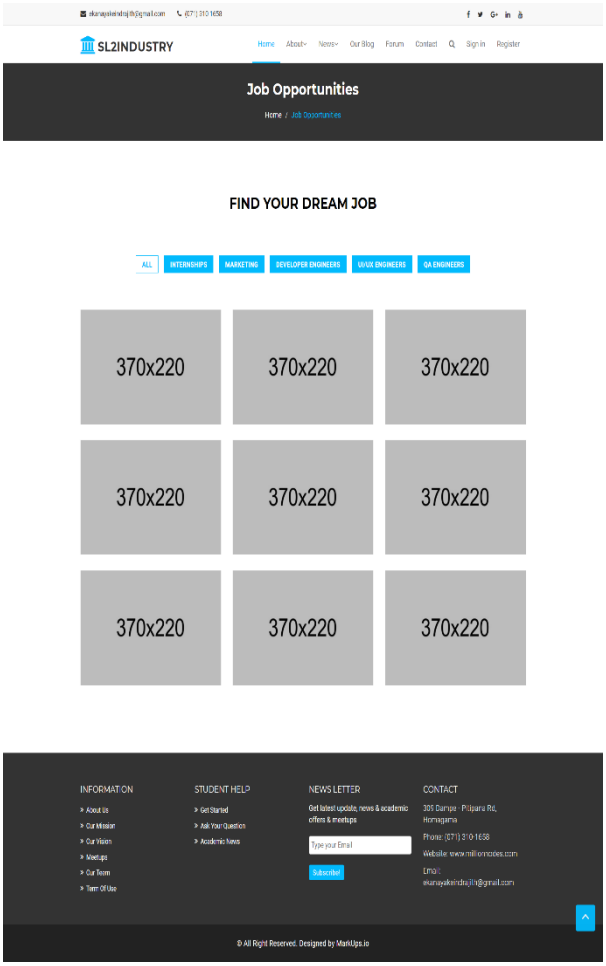


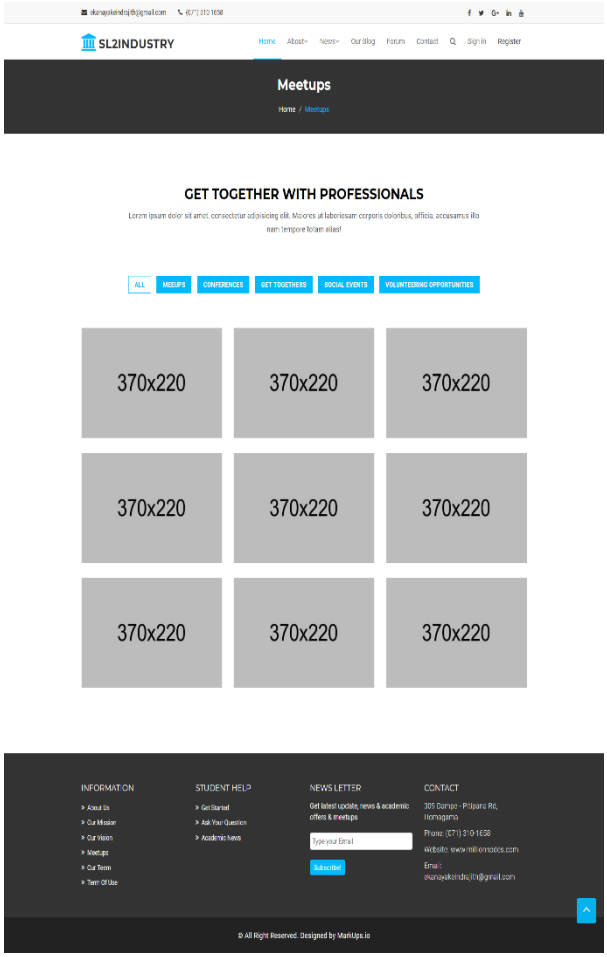
Screenshot2-Figure 11



Screenshot3-Figure 10

Job opportunities and Meetups pages:

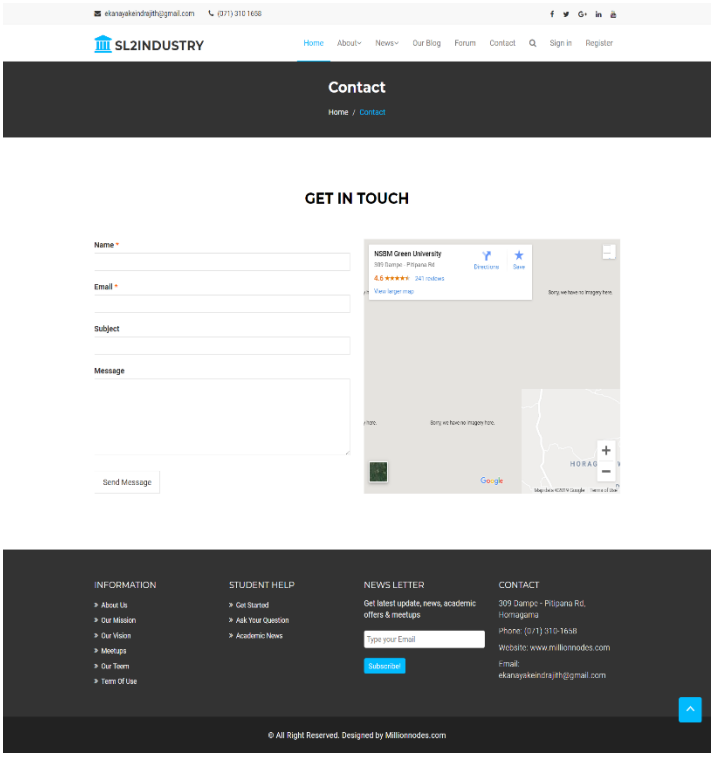




Screenshot4-Figure 13

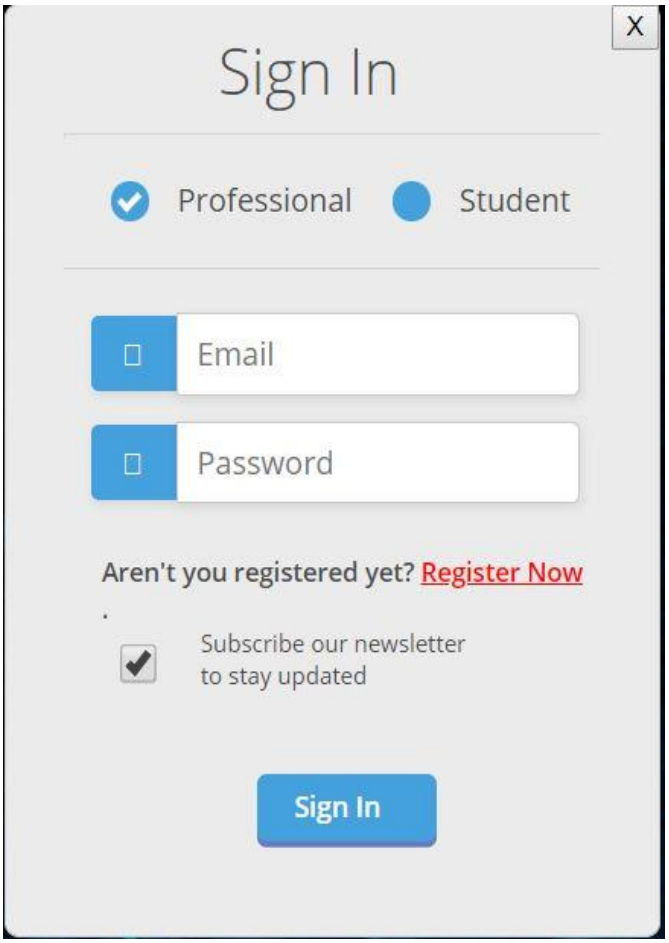
Screenshot5-Figure 14

Contact Us:

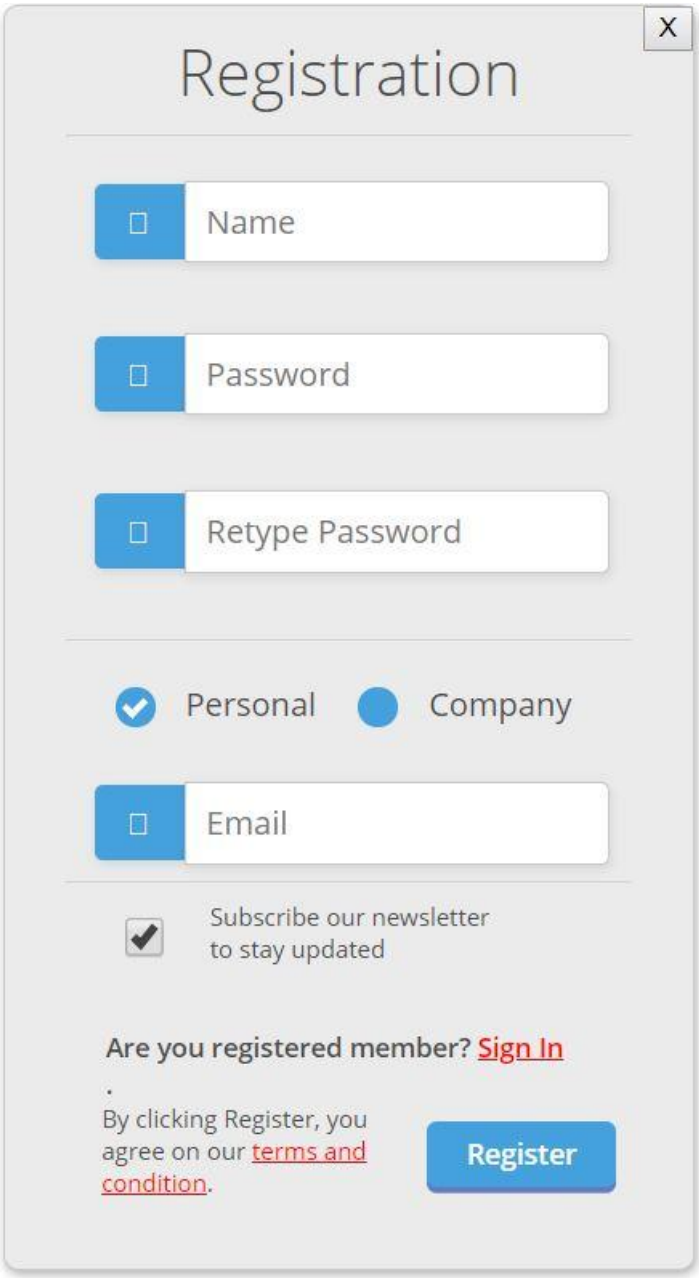


Screenshot6-Figure 15

Login & Registration:

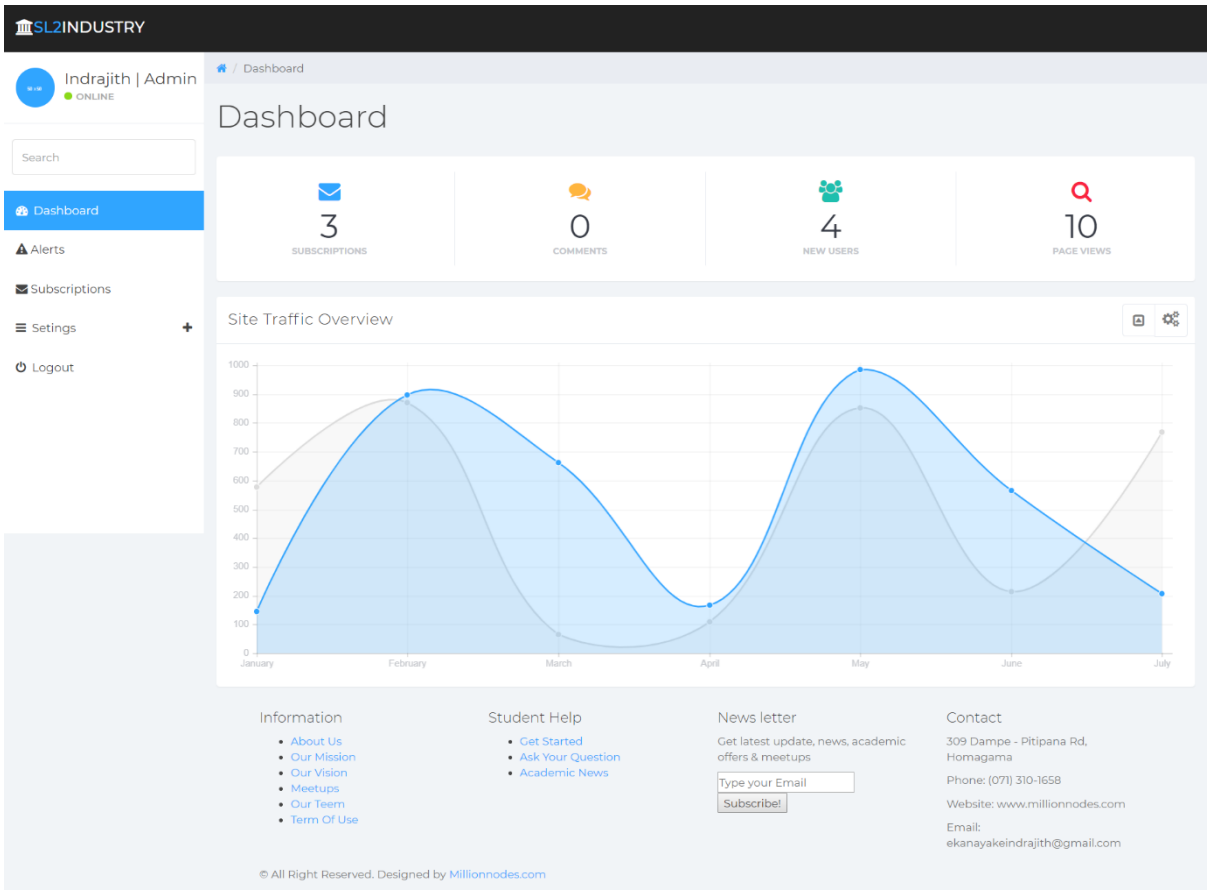


Screenshot7-Figure 16



Screenshot8-Figure 17

Admin Dashboard:



Screenshot9-Figure 18

4.6. Screenshots of Database

Tables:

	Table	Action	Rows	Type	Collation	Size	Overhead
☐	ambassador	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	32 KiB	-
☐	industryrepproffesioncy	Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	16 KiB	-
☐	industryrepresentative	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	48 KiB	-
☐	post	Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	304 KiB	-
☐	postevent	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	32 KiB	-
☐	postjob	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	32 KiB	-
☐	postreserchidea	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	32 KiB	-
☐	publishindustry	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	32 KiB	-
☐	university	Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	448 KiB	-
	9 tables	Sum	20	InnoDB	latin1_swedish_ci	976 KiB	0 B

Table Ambassador:

+ Options

	NIC	VolunteeringExperience	ContactNo	FBProfileURL	LinkedinPrpfileURL	UniversityID
☐ Edit Copy Delete	972840602V	SAC Webmaster IEEE Sri Lanka Section IEEE Student...	713101658	https://www.facebook.com/indrajith.ekanayake.902	https://www.linkedin.com/in/indrajith-ekanayake-11...	1

Check all *With selected:* Edit Copy Delete Export

Table IndustryRepProffesiancy:

Table IndustryRepresentative:

Table Post:

Table PostEvent:

Table PostJob:

Table PostReserchIdea:

+ Options

	RequiredTechnologies	PostID
Edit Copy Delete	Teamwork skills JEE JSP SpringBoot	3

Check all With selected: Edit Copy Delete Export

Table PublishIndustry:

+ Options

	ID	PostID
Edit Copy Delete	1	2
Edit Copy Delete	2	3

Check all With selected: Edit Copy Delete Export

Table University:

+ Options

	UniversityID	UniversityName	Password	Email	NewsletterSubscription	Photo	StudentName
Edit Copy Delete	1	NSBM Green University	123	ekanayakeindrajith@gmail.com	1	[BLOB - 32.2 KiB]	Indrajith Ekanayake
Edit Copy Delete	2	NSBM Green University	123	asiriiroshan@hotmail.com	0	[BLOB - 89.2 KiB]	Asiri Iroshan
Edit Copy Delete	3	NSBM Green University	123	sewmaltsl@gmail.com	1	[BLOB - 177.1 KiB]	Sewmal Tharindu
Edit Copy Delete	4	NSBM Green University	123	prabodhanipiumi@gmail.com	1	[BLOB - 79.8 KiB]	Piumi Prabodhani
Edit Copy Delete	5	University of Colombo	123	123@gmail.com	1	*NULL*	Ayesh

Check all With selected: Edit Copy Delete Export

5. Testing

Software testing helps value addition of software with minimum bugs and good quality. We had gone through so many test cases and so many tough situations to make it success the final test case as follows,

Testing-Figure 19

Finally, the system running with full functionalities as shown in above (GUI Screenshots)

6. Critical evaluation

The intention of our system is to provide a user friendly and hassle-free service for students as well as Industry professionals with maximum level of security. But the current iteration of the system has a couple of unrefined items.

7. Future Implementations

Hope to add additional functionalities to the existing system. Such as event calendar option.

Make system more responsiveness and hope to host the website in actual server in cloud.

Finally, we would like to get sponsorship from NSBM for our marketing, hosting and purchasing a domain to implement this in real-world as our new startup. Since we are entrepreneurs we are not stopping at this point, we have long way to go with this implementation.

8. Our Contribution

K C A A Iroshan

E.M.I.J Ekanayake

M.D.S.Tharindu

G.H.P.Prabodhani

A.A.A.Dulanja

Member / Activity	Member 01 ID:10638366	Member 02 ID:10638431	Member 03 ID:10638389	Member 04 ID:10638387	Member 05 ID:10638378
Complete Login & Register	S	S	S	Responsible	S
Presentation layer & Home page post publishing	S	S	Responsible	S	S
User profile	Responsible	S	S	S	S
Posts creating	S	Responsible	S	S	S
Database & Post creating	S	S	S	S	Responsible
Total Contribution	20%	20%	20%	20%	20%

Turnitin Report

SOFT255SL_Term2_FinalReport(Team3).docx

ORIGINALITY REPORT

8%	8%	0%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

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5	gdrc.org Internet Source	<1%
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7	www.loftway.com Internet Source	<1%
8	www.statustats.com Internet Source	<1%
9	gtmetrix.com Internet Source	<1%