Mini Project Progress Journal

2021

DEPARTMENT OF COMPUTING AND INFORMATION SYSTEMS
FACULTY OF APPLIED SCIENCES
SABARAGAMUWA UNIVERSITY OF SRI LANKA

Compiled and Published by:
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Belihuloya, 70140, Sri Lanka

The information in this document was correct and up to date at the time of publication. The Department reserves the right to modify any statement if necessary by the departmental examination/assessment panel.

Version 1.0 October 2021

Contents

Introduction to Mini Projects

Overview

Mini Project (IS 31230) is a compulsory course module to complete the Bachelor of Science Honours Degree Programme in Computing and Information Systems offered by the Department of Computing and Information Systems (DCIS), Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka. Every Student should have to complete this Mini Project in their Semester V as an individual project. This course will enable students to carry out a project work to implement a solution for real world IT problem, under the supervision of an internal supervisor and a mentor provided by the Department. The Internal Supervisor are responsible to help students if they have any internal matters and they should monitor the interaction between the students and mentors and evaluate the progress of the students. The mentors should aware the students about the emerging technologies and current trends in the Software Industry and guide the students to apply those technologies with their projects. Also Mentors should monitor the progress of the student continuously and all the students are required to submit a Project Progress Journal once in three weeks to the mentor and the Internal Supervisor. Mentors and Internal Supervisors can schedule meetings with the students to assess the progress as well as to discuss about the project work. A student is responsible to update the progress of the project and address the feedbacks given by the mentors throughout the semester and complete the final software product before the end of the semester by covering all the requirements and the scope defined initially. The Mini Project is evaluated by supervisors and a same panel of evaluators in the Proposal Presentation, Prototype Demonstration I, and in the Final Evaluation.

The duration for the Mini Project is 15 Weeks (One Semester) and it weighted 2 credits. Upon successful completion of this course, the student will be able to identify the requirements for the real-world IT problems, study & enhance software/ hardware skills, demonstrate & build the project successfully by hardware requirements, coding and emulating & testing Report & present the findings of the study conducted in the preferred domain.

Vision

Our vision is to guide the Computing and Information Systems (CIS) Students to achieve their individual goals and to lead the next generation of IT professionals in advancing Information Technology and Business Process Management (IT/BPM) industry.

Mission

Our mission is to produce computing graduates to design and develop quality software solutions, work effectively within challenging environments and being good professionals. Since the field of computing has rapidly grown and diversified, we haveto create computing graduates who is with high-quality standards, broad-based education and experiential learning in computing, create knowledge through pioneering scholarship and impactful research, enrich our students' development andleadership skills, and nurture the inherent innovation of our students.

Objectives

Objectives of the Mini Project work:

- Offer students a glimpse into real world problems and challenges that need IT based solutions
- Enable students to create very precise specifications of the IT solution to be designed.
- Introduce students to the vast array of literature available of the various research challenges in the field of IT
- Create awareness among the students of the characteristics of several domain areas where IT can be effectively used.
- Enable students to use all concepts of IT in creating a solution for a problem
- Improve the team building, communication and management skills of the students.
- Helps in exploring career opportunities in their areas of interest.
- Gives an insight into the working of the real organizations/companies.
- Develop students' ability to apply knowledge and techniques learnt in theoretical classes to develop software products for real world problems.
- Gives an insight of a real working environment of an organization to the stude
- Assist students in exploring career opportunities in their areas of interest.
- Develop students' reporting, presenting and demonstrating ability.

Intended Learning Outcomes

Upon successful completion of this course, the student will be able to:

ILO1 Discover potential research/Development areas in the field of IT
ILO2 Conduct a survey of several available literature in the preferred field of study.

ILO3 Compare and contrast the several existing solutions for research/development challenge

ILO4 Demonstrate an ability to work in teams and manage the conduct of the research study or Development project

ILO5 Formulate and propose a plan for creating a solution for the research/development plan identified

ILO6 To report and present the findings of the study conducted in the preferred domain

Introduction to Mini Project Progress Journal

Mini Project Progress Journal is

- A way to document all Mini project activities throughout the semester.
- An important mechanism for the internal supervisors and mentor to evaluate and assess a student's attitude and ability and also to monitor the status of the student's project throughout the semester.

Students are

- Required to write clearly and honestly all activities performed and then to summarize their work every week.
- Highly encourage to maintain a separate file/folder to compile all their findings/ printouts/ datasheets as a complement to this progress journal.

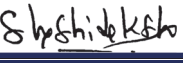
Reminder to students

- This journal must be presented to your Mentor and the Internal Supervisor once in three weeks.
- All activities conducted must be recorded at the activities section in the Project Progress Journal. Signatures of relevant persons can also be recorded as proof of your claim at the activities section (optional but highly recommended).
- This journal must be submitted to your internal supervisor and mentor along with your Final Report to be graded by your internal supervisor and the mentor at the required date (Refer to Mini Project Guidelines).

Student Information

Full Name	ashen iranga hewarathna	
Registration No	17APC3081	
Email	aihewarathna@std.appsc.sab.ac.lk	
Telephone Number	0788136641	
Internal Supervisors' Details	**Name**	Mr P Vigneshwaran
	Profession	Lecturer(Probationary)
	Contact Details	0725905553
Mentors' Details	**Name**	K.M.K.S.Karunanayake
	Profession	Researcher
	Contact Details	0760833077
Mentors' Details	**Name**	
	Profession	
	Contact Details	
Project Title	AI Agent For Identifying Leaf Diseases In Crops	
Project Description	This AI agent seeks to apply Machine Learning and Image Processing techniques to the problem of autonomous disease detection and classification in rice, cassava, cherry, corn, grapes, potato, soybeans, strawberry, and tomato plants.	

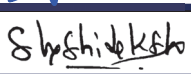
Week 1

Duration	Start Date		End Date	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2021-11-29	idea gathering, searching for research papers.	to choose a topic for project		
2021-11-30	decide final topic			
2021-12-01	create project repository and project tracking	mange the project		
2021-12-02	looking for data sources	analyze technical feasibility	data found in different sources	download all datasets
2021-12-03	get accept from supervisor			
2021-12-04	start to create project proposal	project documentation		
2021-12-05	start to build DNN architecture	to build model architecture		
Summary for the week	choose topic and found data sources.			
Task for the next week	discuss with supervisor.			
Remarks				
Signature of the Student			**Date**	12-30-2021
Signature of the Mentor			**Date**	1/2/2022
Signature of the Internal Supervisor			**Date**	**30/12/2021**

Week 2

Duration	Start Date		End Date	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2021-12-06	to build model architecture	to find good dataset	privious rice dataset not good	try to find new data
2021-12-07	start to study more about DNN architectures	to build model architecture		
2021-12-08	working on documentations	project documentation		
2021-12-09	working on documentations	project documentation		
2021-12-10	working on documentations	project socumentation		
2021-12-11	study about DNN architecture	build model architecture		
2021-12-12	study about DNN architecture	build model architecture		
Summary for the week	start project documentations and learn more about DNN architectures			
Task for the next week	complete documentation			
Remarks				
Signature of the Student			**Date**	12.30.2021
Signature of the Mentor	Shashikala		**Date**	1/2/2022
Signature of the Internal Supervisor			**Date**	**30/12/2021**

Week 3

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2021-12-13	complete drafting project proposal	project documentation		
2021-12-14	compelete project documentation	project documentation		
2021-12-15	get mentor accept on draft documentation	project documentation		
2021-12-16	get supervisor accept on draft documentation	project documentation	few correction needed	make all corrections
2021-12-17	start organize and clean dataset	data pre-process	unorganize data	
2021-12-18				
2021-12-19				
Summary for the week	most of the time spend on documentation and studying DNN architectures.			
Task for the next week	finalize documentations			
Remarks				
Signature of the Student			**Date**	12-30-2021
Signature of the Mentor			**Date**	1/2/2022
Signature of the Internal Supervisor			**Date**	**30/12/2021**

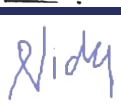
Week 4

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2021-12-21	start implimentation	model creation		
2021-12-22	create first architecture	model creation		
2021-12-23	create first architecture	model creation		
2021-12-24	create first architecture	model creation		
2021-12-25	create first architecture	model creation		
2021-12-26	testing and first evaluation	model creation	low accuracy	new architecture
2021-12-27				
Summary for the week	creation and test architecture on test data and analize model performance			
Task for the next week				
Remarks				
Signature of the Student			**Date**	1-23-2022
Signature of the Mentor			**Date**	1/23/2022
Signature of the Internal Supervisor			**Date**	**23.01.2022**

Week 5

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2021-12-28	create a new architecture based on VGGNet	model creation		
2021-12-29	create a new architecture based on VGGNet	model creation		
2021-12-30	create a new architecture based on VGGNet	model creation		
2021-12-31	create a new architecture based on VGGNet	model creation		
2022-01-01	create a new architecture based on VGGNet	model creation		
2022-01-02	create a new architecture based on VGGNet	model creation		
2022-01-03	create a new architecture based on VGGNet	model testing and evaluation	model skewd to one class	genaralization technics
Summary for the week	VGGNet research implementaions and new custom architecture creation			
Task for the next week	start to build web application and android			
Remarks				
Signature of the Student			**Date**	1-23-2022
Signature of the Mentor			**Date**	1/23/2022
Signature of the Internal Supervisor			**Date**	**23.01.2022**

Week 6

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-01-04	creation of VGGNet and Inception hybrid model	model creation		
2022-01-05	create basic layout and combine model into web app	deployment of web app	api difficulties	change the loigc
2022-01-06				
2022-01-07	creation of VGGNet and Inception hybrid model	model creation		
2022-01-08	android application build starts	layout creation		
2022-01-09				
2022-01-10	creation of VGGNet and Inception hybrid model	model creation		
Summary for the week	test new architecture and start to build UIs			
Task for the next week	application creation			
Remarks				
Signature of the Student			**Date**	1-23-2022
Signature of the Mentor			**Date**	1/23/2022
Signature of the Internal Supervisor			**Date**	**23.01.2022**

Week 7

Duration	Start Date		End Date	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-01-11	andriod app developments	create UI		
2022-01-12	andriod app developments	create UI		
2022-01-13	andriod app developments	create UI		
2022-01-14	andriod app developments	create UI		
2022-01-15	andriod app developments	connect model into backend	hard to process inputs	
2022-01-16	andriod app developments	connect model into backend	hard to process inputs	
2022-01-17	andriod app developments	first deployment		
Summary for the week	more time on android developments!!			
Task for the next week	test newly foun knowladge on android			
Remarks				
Signature of the Student			**Date**	1-23-2022
Signature of the Mentor			**Date**	1/23/2022
Signature of the Internal Supervisor			**Date**	**23.01.2022**

Week 8

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-01-18	andriod app developments	create flash screen, change result page layout	multiple app installation bug	debug mainfest
2022-01-19	andriod app developments	refine detail page layout		
2022-01-20	andriod app developments	add newest model! change layout in details page		
2022-01-21	andriod app developments	change layout of activity details		
2022-01-22	andriod app developments	populate text views		
2022-01-23	andriod app developments	retriving and showing results for predicted plnat and		
2022-01-24	andriod app developments	add material design look to detail activity		
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			**Date**	3-20-2022
Signature of the Mentor			**Date**	
Signature of the Internal Supervisor			**Date**	

Week 9

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-01-25	andriod app developments	minor changes to main activity layout.		
2022-01-26				
2022-01-27	andriod app developments	add model to detect is there a plant in the frame.		
2022-01-28				
2022-01-29				
2022-01-30				
2022-01-31				
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			**Date**	3-20~2022
Signature of the Mentor			**Date**	
Signature of the Internal Supervisor			**Date**	

Week 10

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-02-01				
2022-02-02				
2022-02-03	andriod app developments	add load image button from gallery		
2022-02-04				
2022-02-05	andriod app developments	add image load capability to application from		
2022-02-06				
2022-02-07	andriod app developments	add image uploading capability		
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			**Date**	3-10-2022
Signature of the Mentor			**Date**	
Signature of the Internal Supervisor			**Date**	

Week 11

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-02-08	andriod app developments	add example image carousal to detail page		
2022-02-09	andriod app developments	add crop selection menu		
2022-02-10	andriod app developments	basic layout of the ti		
2022-02-11	andriod app developments	change tips providing portal by adding seperate		
2022-02-12				
2022-02-13				
2022-02-14	andriod app developments	add tips providing page		
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			**Date**	3-20-2022
Signature of the Mentor			**Date**	
Signature of the Internal Supervisor			**Date**	

Week 12

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-02-15	andriod app developments	complete cultivation tips provider		
2022-02-16				
2022-02-17	progress evaluation			
2022-02-18	andriod app developments	add fragment files for test new multi-layer result		
2022-02-19	andriod app developments	change local app text to support user selected language.		
2022-02-20	andriod app developments	add on-boarding screens to the application		
2022-02-21	andriod app developments	new layout for cultivation tip crop list and tip type selection menu		
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			**Date**	3-20-2022
Signature of the Mentor			**Date**	
Signature of the Internal Supervisor			**Date**	

Week 13

Duration	**Start Date**		**End Date**	
Date	**Task Completed**	**Objectives of the tasks**	**Problems**	**Solutions**
2022-02-22	andriod app developments	authentication anonymous user implemented		
2022-02-23				
2022-02-24				
2022-02-25				
2022-02-26				
2022-02-27	andriod app developments	Create Terms & Conditions		
2022-02-28	andriod app developments	generate singed apk of first release		
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			**Date**	3-20-2022
Signature of the Mentor			**Date**	
Signature of the Internal Supervisor			**Date**	

Week 14

Duration	Start Date		End Date	
Date	Task Completed	Objectives of the tasks	Problems	Solutions
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			Date	
Signature of the Mentor			Date	
Signature of the Internal Supervisor			Date	

Week 15

Duration	Start Date		End Date	
Date	Task Completed	Objectives of the tasks	Problems	Solutions
Summary for the week				
Task for the next week				
Remarks				
Signature of the Student			Date	
Signature of the Mentor			Date	
Signature of the Internal Supervisor			Date	

Comments by the Mentor/(s)

Comments by the Internal Supervisor

Any other Remarks

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