

MONASH INDUSTRY TEAM INITIATIVE (MITI) FARM ENVIRONMENT PLAN ENHANCEMENT

Cornellio Geordie Setianto (Bachelor of Chemical Engineering (Hons))

Ayesha Ali (Bachelor of Software Engineering (Hons))

Annaelle Li Pin Hiung (Bachelor of Computer Science (Hons))

Mac Nguyen (Bachelor of Pharma Science & Chemical Engineering)



BACKGROUND

Fonterra Australia aims to have a Farm Environment Plan (FEP) for every farm that forms a part of the Fonterra Australia's dairy farming supply chain. However, the current processes are completed manually resulting in many back-and-forth processes between stakeholders. The scope of this project is to develop a digital solution for the data gathering and management, report generation and trend analysis for all Farm Environment Plans.

SOLUTION

The creating and formatting of FEP reports coupled with the back-and-forth process between different files, software, and stakeholders created many time inefficiencies. It was determined that the creation of a user interface would solve these problems and help digitise the entire process by creating a FEP report in an efficient, user-friendly and timely manner.

FUTURE WORK

- Back-end development (Database) for storing and retrieving data
- User permissions to restrict un-authorized access
- Security features including login
- Automatic farm map creation
- Integration with other platforms such as Salesforce
- Offline access

PROJECT SCOPE

Development of a software that:

- Allows the user to collect data digitally
- Contains built-in logics and rules (algorithms) for certain modules within FEP that suggests output, based on series of input
- Provides drop down lists of selections when specific set of inputs are required
- Generate benchmark graph with calculations
- Efficiently produces a FEP report in PDF format with data inputs

PROJECT OUTCOME

Region	ID	Date Created	Date Edited	Creator	Reviewer	VIEW	EDIT
East	E2986	04-05-2022	08-07-2022	Sara	Shane	VIEW	EDIT
North	N0439	01-06-2022	08-09-2022	Sara	Shane	VIEW	EDIT
South	S0289	08-06-2022	09-09-2022	Sara	Shane	VIEW	EDIT
South	S0441	02-06-2022	09-10-2022	Sara	Shane	VIEW	EDIT

Within 10 weeks, the front-end user interface development was completed, tackling the features that are listed in the project scope. This included digital data collection, built-in scoring system, text input, benchmark graph generation, and PDF generation.

ACKNOWLEDGEMENT

We would like to thank Fonterra Australia for this wonderful opportunity. We especially thank our supervisors Sara and Shane, for their patience and commitment in guiding us during our time working at Fonterra. We would also like to thank Monash University and the Gardiner Foundation for allowing us to experience such a professional environment and to gather important skills that will help us during our whole career and life.

