

Sprint 1 Output

Version	Note	Author	Date(DD/MM/YYYY)
1.0	Sprint 1 output documentation	Sejin Kim , Isaac Pedroza Aguirre	27 Sep 2020

During the Sprint 1, the user stories 1 and 2 ([Sprint 1 Planning](#)) were executed. The **branch** `feature/us1_us2` of the GitHub repository ([link below](#)) were used for this development. This document outlines the results of this Sprint:

GitHub Repository

https://github.com/cchia790411/rm_ai_challenge_2020s2_koala

User Guide

https://github.com/cchia790411/rm_ai_challenge_2020s2_koala/blob/master/README.md

Link to the latest release

https://github.com/cchia790411/rm_ai_challenge_2020s2_koala/releases

User story tasks status

#	Task	Comments	Status	Github link (if applicable)
1.01	Identify YOLO algorithm structure, input and output types and Python libraries to implement it.		Done	
1.02	Labelling the images for the armour location algorithm.	These tasks can be done by labelling multiple arguments in single images (pose, armour) using CVAT	Done	All labelled data and images can be found at https://github.com/cchia790411/rm_ai_challenge_2020s2_koala/tree/master/src/images
1.03	Preprocess the images for the armour location algorithm.	Preprocess was not necessary to meet the requirements of the US01, so this task was discarded.	Discarded	
1.04	Implement the YOLO algorithm using Python.	The model was implemented in a Google Colab Notebook.	Done	The notebook can be found at https://github.com/cchia790411/rm_ai_challenge_2020s2_koala/tree/master/build/colab_notebook
1.05	Augment training data for armour location algorithm.	Augmenting training data was not necessary to meet the requirements of the US01, so this task was discarded.	Discarded	
1.06	Training armour location algorithm in the cloud.	The model was trained in Google Colab.	Done	
2.01	Analyse images for the armour identification task and identify approach.		Done	
2.02	Preprocess the images for the armour identification task.	Preprocess was not necessary to meet the requirements of the US02, so this task was discarded.	Discarded	
2.03	Implement armour identification algorithm.	The model was implemented in a Google Colab Notebook.	Done	The notebook can be found at https://github.com/cchia790411/rm_ai_challenge_2020s2_koala/tree/master/build/colab_notebook
2.04	Augment training data for armour identification algorithm.	Augmenting training data was not necessary to meet the requirements of the US01, so this task was discarded.	Discarded	
2.05	Training armour identification algorithm in the cloud.	The model was trained in Google Colab.	Done	

List of Technologies used in Sprint 1

- **Platform:** Google Colab Notebook
- **Algorithm for Armour Detection and Pose Recognition:** YOLO v4
- **Software for Augmentation and Labeling:** CVAT
- **Communication:** Slack, Trello, Zoom, Confluence
- **Version Control:** Github