

OVERVIEW PROJECTS TIMELINE TO ARRANGE STATISTICAL PROGRAMMER RESOURCE VIA R SHINY



KuenHung Lin
Statistical Programmer
Pharmaceuticals Co., Ltd
Taipei, Taiwan



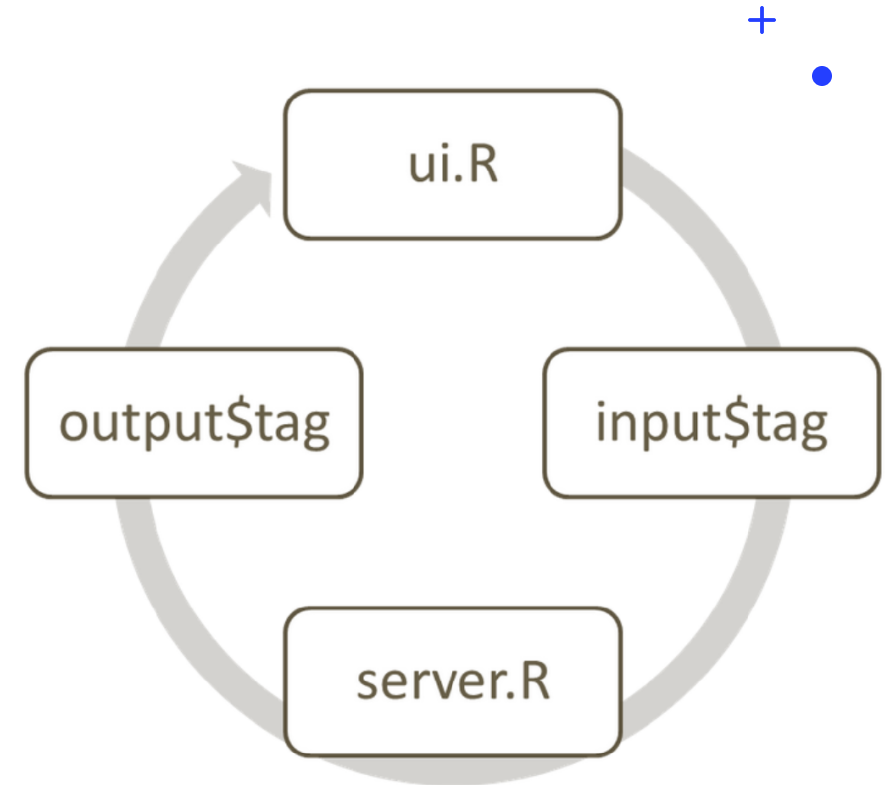
I'M PRESENTING
AT THE
EU CONNECT 2021

15th-19th November | Register at phuse.global/events_calendar



R Shiny

- Shiny is an R package that makes it easy to build interactive web apps straight from R
- R has the advantage of being open-source and having a large user-base



AGENDA

- Introduction
 - Motivation
- The Shiny Application
 - ◆ User Interface (UI)
 - ◆ Server Outputs
- Conclusion



I'M PRESENTING
AT THE
EU CONNECT 2021

15th–19th November | Register at phuse.global/events_calendar

INTRODUCTION



**I'M PRESENTING
AT THE
EU CONNECT 2021**

15th–19th November | Register at phuse.global/events_calendar

Introduction

- Timelines are a fundamental tool for effective clinical project management
- Creating timelines is a tedious one that sees many timeline users resort to highly manual tools that lack rigorous data integration and flexibility of customization

Introduction

- Interactive web application to visualize projects timeline via R Shiny
- Targets:
 - ✓Interactive
 - ✓Customizable

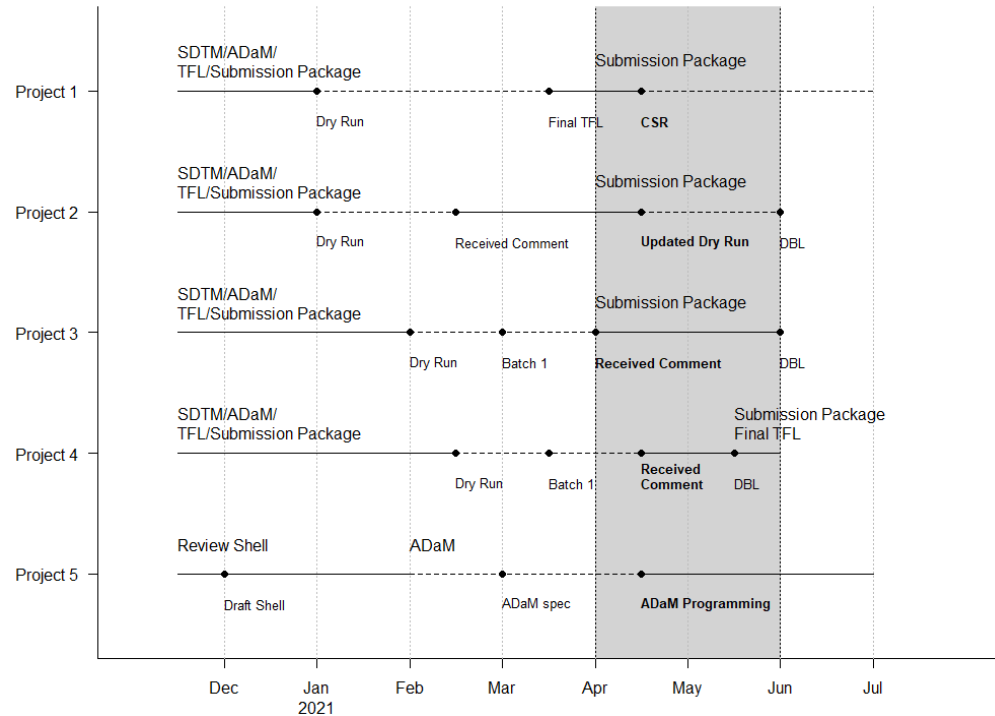
MOTIVATION



**I'M PRESENTING
AT THE
EU CONNECT 2021**

15th–19th November | Register at phuse.global/events_calendar

The output is typically static with limited ability for end users to explore the data in real time



THE SHINY APPLICATION

User Interface (UI)



I'M PRESENTING
AT THE
EU CONNECT 2021

15th-19th November | Register at phuse.global/events_calendar

	A	B	C	D	E	F
1	project	task	start_dt	end_dt	note	timepoint
2	Project 1	Final TFL	2020-12-01	2021-04-30	DBL	2021-02-01
3	Project 1	Final TFL	2020-12-01	2021-04-30	Delivered to Medical Writer	2021-02-19
4	Project 1	Submission Package	2021-05-01	2021-07-31	Biostat Review	2021-06-23
5	Project 1	Submission Package	2021-05-01	2021-07-31	Biostat 2nd Review	2021-07-05
6	Project 2	Dry Run	2020-12-01	2021-02-05	Biostat Review	2021-02-05
7	Project 2	Dry Run	2020-12-01	2021-02-24	Delivered to Medical Reviewer	2021-02-24
8	Project 2	Final TFL	2021-10-01	2021-10-31	SAP/Shell finalized	2021-10-04
9	Project 2	Final TFL	2021-10-01	2021-10-31	DBL	2021-10-29
10	Project 3	Offline Listing	2020-12-01	2021-06-30	1st delivery to CDA	2021-01-20
11	Project 3	SDTM	2020-12-01	2021-06-30	SDTM mapping spec	2021-03-05
12	Project 3	SDTM	2020-12-01	2021-06-30	SDTM programming	2021-04-06

- **project:** It typically will be protocol number or company codename of protocol
- **task:** For each project, it will contain one or more tasks, such as offline listing, SDTM or dry run
- **start_dt:** The start date for the duration of each task
- **end_dt:** The end date for the duration of each task
- **note:** The description of stage during each task
- **timepoint:** The date of stage

Choose xlsx file

Browse... No file selected

Project

AAA

Task

BBB

Start Date input

2021-09-24

End Date input

2021-09-24

Note

DBL

Timepoint

2021-09-24

Add

Excel File Name

timeline

Download (*xlsx)

There is a need to pay special attention that **existed EXCEL file should be uploaded before adding**, once adding is executed, then the field of import EXCEL file will be hidden in UI

THE SHINY APPLICATION

Server Outputs



I'M PRESENTING
AT THE
EU CONNECT 2021

15th-19th November | Register at phuse.global/events_calendar

Editable timeline table

Project Timeline Table

Project Timeline Figure

Show

25

 entries

Search:

	project	task	start_dt	end_dt	note	timepoint
1	Project 1	Final TFL	2020-12-01	2021-04-30	DBL	2021-02-01
2	Project 1	Final TFL	2020-12-01	2021-04-30	Delivered to Medical Writer	2021-02-19
3	Project 1	Submission Package	2021-05-01	2021-07-31	Biostat Review	2021-06-23
4	Project 1	Submission Package	2021-05-01	2021-07-31	Biostat 2nd Review	2021-07-05
5	Project 2	Dry Run	2020-12-01	2021-02-05	Biostat Review	2021-02-05
6	Project 2	Dry Run	2020-12-01	2021-02-24	Delivered to Medical Reviewer	2021-02-24
7	Project 2	Final TFL	2021-10-01	2021-10-31	SAP/Shell finalized	2021-10-04
8	Project 2	Final TFL	2021-10-01	2021-10-31	DBL	2021-10-29
9	Project 3	Offline Listing	2020-12-01	2021-06-30	1st delivery to CDA	2021-01-20
10	Project 3	SDTM	2020-12-01	2021-06-30	SDTM mapping spec	2021-03-05
11	Project 3	SDTM	2020-12-01	2021-06-30	SDTM programming	2021-04-06

Showing 1 to 11 of 11 entries

Previous

1

Next

Visualization of timeline

Project

Task

Start Date input

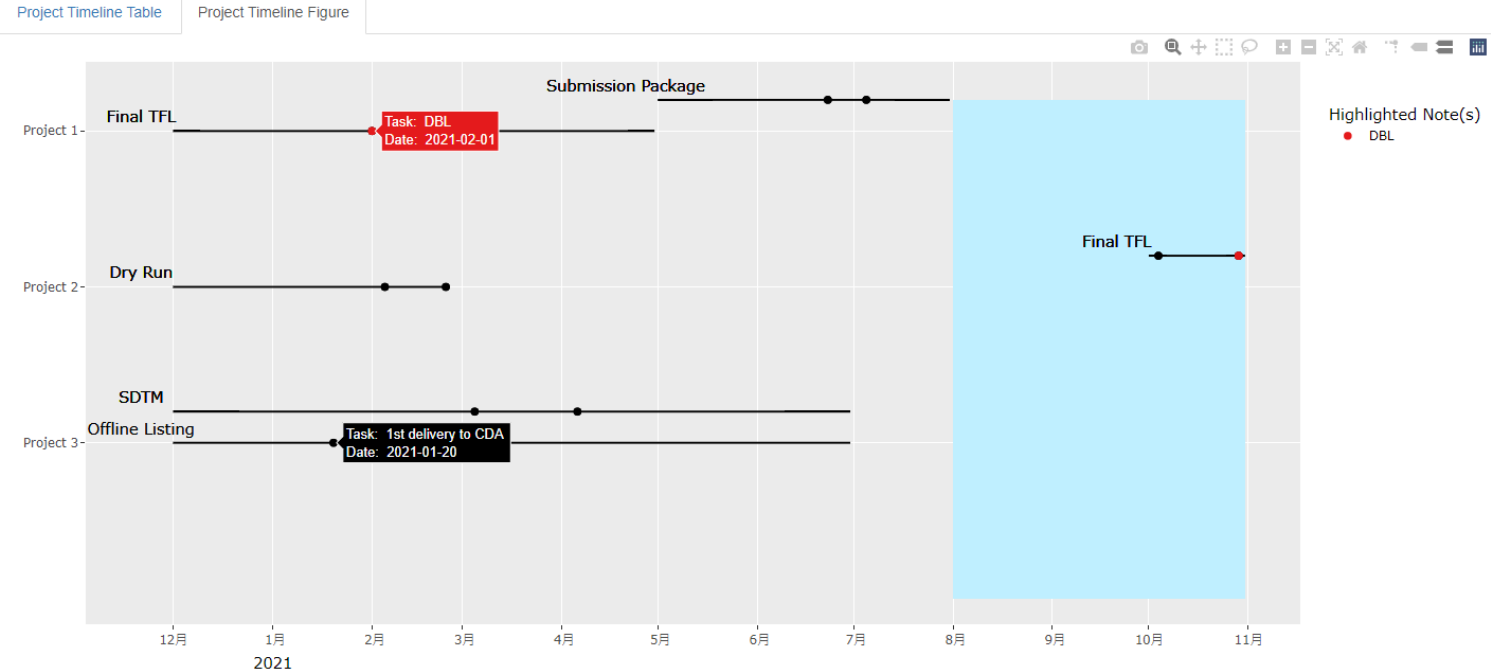
End Date input

Note

Timepoint

Choose highlighted Note (Max: 9 Notes)

note
Delivered to Medical Writer
Biostat Review
Biostat 2nd Review
Delivered to Medical Reviewer
SAP/Shell finalized
1st delivery to CDA
SDTM mapping spec



CONCLUSION



I'M PRESENTING
AT THE
EU CONNECT 2021

15th-19th November | Register at phuse.global/events_calendar

Conclusion

- Limitation and inconvenience that is mentioned as the motivation overcomes via the proposed application:

<https://kuenhunglin.shinyapps.io/TimelineOverview/>

- Further development is to add the tab of descriptive statistics for resource per month to connect with visualization timeline tab

THANK YOU



Name: KuenHung Lin

Organization: Pharmaceuticals Co., Ltd

E-mail: kuenhunglin@athenex.com



I'M PRESENTING
AT THE
EU CONNECT 2021

15th-19th November | Register at phuse.global/events_calendar