1. Intro

DrPH Yr 1 Sem 1 2019/2020

14/12/2019

Instruction

DrPH Yr 1 Sem 1 2019/2020 Mock Exam

- Time 9am - 12pm

0. Preparation (~15 min)

- 9.30am - 9.45am

1. Check each computer have (latest) R software

- Start Menu -> R
- latest is 3.6.2

```
install.packages("installr")
library(installr)
updateR()
```

2. Close R
3. Check each computer have (latest) RStudio IDE Software

- Start Menu -> RStudio
- Help -> About RStudio
- latest: 1.2.5019

4. Open MockExam Project

- New Project
- Version Control
- Git
- Repository URL : https://github.com/puterabemi/MockExam.git
- Project Directory Name : MockExam
- Subdirectory : ~/Rstudio

5. Run Code below (Common Packages)

1. - Load Common Packages

```
install.packages("pacman")
library(pacman)
p_load(haven, foreign, broom, tidyverse, psych, corrplot, knitr, LogisticDx, generalhoslem, ResourceSel
```

2. ANOVA (15 - 30min)

- 10am - 10.15am

1. Open the Files Tab
2. Open the 2—ANOVA.html file
3. Follow the instruction in the html file.

3. ANCOVA (15 - 30min)

- 10.20am - 10.35am

1. Open the Files Tab
2. Open the 3—ANCOVA.html file
3. Follow the instruction in the html file.

4. RM ANOVA (15 - 30min)

1. Open the Files Tab
2. Open the 4—RM ANOVA.html file
3. Follow the instruction in the html file.

5. Linear Regression (15 - 30min)

- 11am - 11.15am

1. Go to Files Tab
2. Open 5 - Linear Regression.Rmd file
3. Follow Instruction in the file

6. Logistic Regression (15 - 30min)

- 11.20am - 11.35am

1. Go to Files Tab
2. Open 6 - Logistic Regression.Rmd file
3. Follow Instruction in the file
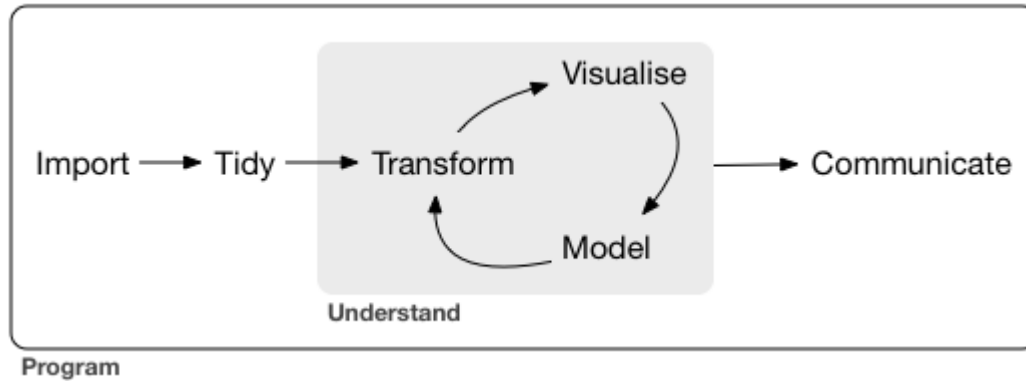
7. Survival Analysis (15 - 30min)

- 11.40am - 11.55am

1. Go to Files Tab
2. Open 7 - Survival Analysis.Rmd file
3. Follow Instruction in the file

8. Others (Theories) (30 - 45min)

TQ-1

Discuss each component of workflow data analysis below (10m) - daus ashraf ayu

TQ-2

Discuss consideration to select covariates in ANCOVA model (10m) - zul azmi fahmi

TQ-3

Discuss how to handle interaction in ANOVA, ANCOVA or RM ANOVA - alif, anwar, zikr

TQ-4

Discuss variable selection in Multivariable Regression Model (10m) - hazwan nizam faizul

TQ-5

List assumption (test, model fitness etc)

- Factorial ANOVA - alif nasr anwar
- Factorial ANCOVA - zikr faiz elyas
- RM ANOVA - nizam daus zikr
- Linear Regression - zul fahmi faiz
- Logistic Regression - anwar elyas ashraf
- Survival Analysis - nasr hazwan ayu

9. Answer