



# CURRENCY CONVERTOR

Lab 06

# TO COMPLETE THIS LAB

- PC
- Unity
- GitHub Desktop Client
- GitHub account
- Microsoft office application
- Group of 2 students – (Student A and Student B)

# STEP 1: SETTING UP

- Create a new repo name: Lab06
- Create new Unity Project, 00\_HanselKoh\_Lab06
- **Commit and push your progress** to GitHub during your development

# STEP 2: DESIGN A SCENE

- You are to create a scene for the calculator in Unity
- Using UI component such as
  - Text
  - Input Field
  - Button
  - Toggle

Currency Converter

Amount

Select Currency ☒ US Dollars ☒ Japanese Yen

Value

Debugging Text

# STEP 2: DESIGN A SCENE

- You are to create a scene for the calculator in Unity
- Using UI component such as
  - Text
  - Input Field
  - Button
  - Toggle

Sno	UI Type	GameObject Name	Display text	Remarks
1	Text	TextAmount	Amount	
2	Text	TextSelectCurrency	Select Currency	
3	Text	TextValue	Value	
4	Input Field	InputAmount		
5	Input Field	InputConvertedAmt		Read Only
6	Button	BtnConvert	Convert	
7	Button	BtnClear	Clear	
8	Toggle	ToggleUSDollars	US Dollars	
9	Toggle	ToggleJapaneseYen	Japanese Yen	
10	Text	DebugText	Debugging Text	

# STEP 3: REFERENCE

Write a CalculatorScript to perform the required conversion of different currency

Use the below snippet to get or set values for Toggle and InputField

- Currency conversion rate
  - SGDUSD: 0.74
  - SGDJPY: 82.78
- Get / Set of toggle
  - `toggleUSDollar.isOn = false;`
- Get / Set of Input Field
  - `inputConvertedAmount.text = "$" + (amount + SGDUSD_rate);`
- Convert Text to float
  - `float amount = float.Parse(inputAmount.text);`

# STEP 5: TEST AND ADD MORE FEATURES

- Test and ensure the currency conversion works
- Debug application if any errors/bugs
- Clear button resets amount, converted amount and toggles.
- Implement handle exception when invalid value for the amount. Display “Please enter a valid amount”. Hint: Try/Catch
- Test and debug application, ensure all functionalities works as intended.
- Save your project

# PART 6: ADDING A COLLABORATOR

- Add your assigned classmate as collaborator to your repository
- Add 00-HanselKoh as collaborator as well



# PART 7: COLLABORATOR CONTRIBUTE

- Invited collaborator will receive an email
- Click the link provided in your email to accept the invitation
- Clone the repository to your local GitHub client
  - Student A clones the repository created by Student B
  - Student B clones the repository created by Student A
- File > Clone Repository > URL

# STEP 8: UPDATE PROJECT

To be done by the collaborators...

Add the following feature(s) to your classmates' repository

- Update the currency convertor with following conversion
  - 1 SGD converts to 3.08 Malaysian RM
  - 1 SGD converts to 0.63 European EUR
  - 1 SGD converts to 881.54 Korean KRW
  - 1 SGD converts to 20.73 Taiwan TWD
- Add the following

**Commit and Push  
your progress while  
coding new features!**

Sno	UI Type	GameObject Name	Display text	Remarks
1	Toggle	ToggleMalaysianRM	Malaysian Ringgit	
2	Toggle	ToggleEuropeanEUR	European Euro	
3	Toggle	ToggleKoreanKRW	Korean Won	
4	Toggle	ToggleTaiwanTWD	Taiwan Dollar	

# REFERENCE

## Currency Converter

Amount

Select Currency

☒ US Dollars

☒ Japanese Yen

☒ Malaysian Ringgit

☒ European Euro

☒ Korean Won

☒ Taiwan Dollar

Value

Convert

Clear

Debugging Text

# STEP 9: OWNER TEST THE UPDATES

- After collaborators have integrated the additional features
- Repository owner to perform **integration testing** of the convertor
- Refer to the next slides for the template of integration test cases
- Create a minimum of 10 test cases to perform integration testing for currency conversion application

Compare yours with the given below

<https://simmer.io/@itegpd/~0598aa49-4edd-f695-3686-ec4661e2a9da>

# INTEGRATION TESTING EXAMPLE

Test case ID	Description	Input	Expected Result	Actual Result	Pass/Fail	Remarks
I	Verifying the interface link, between Main scene and Game Play scene	Mouse input	User can use the Game Play Scene	Can see the Game Play scene	Pass	Nil

# STEP 10: INTEGRATION TESTING

Test case ID	Description	Input	Expected Result	Actual Result	Pass/Fail	Remarks
1						
2						
3						

# STEP 10: INTEGRATION TESTING

Test case ID	Description	Input	Expected Result	Actual Result	Pass/Fail	Remarks
4						
5						
6						

# STEP 10: INTEGRATION TESTING

Test case ID	Description	Input	Expected Result	Actual Result	Pass/Fail	Remarks
7						
8						
9						
10						



# STEP 11: SUBMISSION

- Zip Unity Project as 00\_HanselKoh\_Lab06
- Save this slides in pdf version
  - (Submit updated slides: I3, I4, I5. Please delete other slides)
- Include your Git URL in MyConnexion
- Upload to MyConnexion