# **BELAJAR PHALCON**

# **BELAJAR PHALCON Buku Phalcon Untuk Pemula**

**Rolly M. Awangga** Politeknik Pos Indonesia



Kreatif Industri Nusantara

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# **FOREWORD**

This is the foreword to the book.

# **PREFACE**

This is an example preface. This is an example preface. This is an example preface. This is an example preface.

R. K. WATTS

Durham, North Carolina September, 2007

# **ACKNOWLEDGMENTS**

From Dr. Jay Young, consultant from Silver Spring, Maryland, I received the initial push to even consider writing this book. Jay was a constant "peer reader" and very welcome advisor durying this year-long process.

To all these wonderful people I owe a deep sense of gratitude especially now that this project has been completed.

G. T. S.

# **ACRONYMS**

ACGIH American Conference of Governmental Industrial Hygienists

AEC Atomic Energy Commission

OSHA Occupational Health and Safety Commission SAMA Scientific Apparatus Makers Association

### **GLOSSARY**

NormGibbs Draw a sample from a posterior distribution of data with an un-

known mean and variance using Gibbs sampling.

pNull Test a one sided hypothesis from a numberically specified poste-

rior CDF or from a sample from the posterior

sintegral A numerical integration using Simpson's rule

# **SYMBOLS**

- A Amplitude
- & Propositional logic symbol
- a Filter Coefficient
- B Number of Beats

### **INTRODUCTION**

CATHERINE CLARK, PHD.

Harvard School of Public Health Boston, MA, USA

The era of modern began in 1958 with the invention of the integrated circuit by J. S. Kilby of Texas Instruments [?]. His first chip is shown in Fig. I. For comparison, Fig. I.2 shows a modern microprocessor chip, [4].

This is the introduction. This is the introduction. This is the introduction. This is the introduction. This is the introduction.

$$ABCD\mathcal{E}\mathcal{F}\alpha\beta\Gamma\Delta\sum_{def}^{abc}\tag{I.1}$$

#### **REFERENCES**

- 1. J. S. Kilby, "Invention of the Integrated Circuit," *IEEE Trans. Electron Devices*, **ED-23**, 648 (1976).
- 2. R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- 3. J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).

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#### **CHAPTER 1**

### PHALCON - OVERVIEW

Phalcon -Overview

#### 1.1 Pengenalan

Phalcon diperkenalkan sebagai salah satu Framework PHP terbaru, yang dikembangkan oleh sekelompok pengembang yang antusias. Phalcon adalah Framework yang digabungkan secara longgar, yang berarti memungkinkannya bisa membuat komponen objek menempel seperti lem, berdasarkan kebutuhan aplikasi.

Phalcon memberikan beberapa fitur yang unik sebagai keunggulan dibandingkan framework yang lain (baik framework tradisional atau yang sering dipakai) di pemrograman PHP. Diantaranya:

- Framework yang full-stack open source
- User hanya membutuhkan code yang lebih sedikit untuk mendapatkan keuntungan di beberapa komponen

- bisa dipakai untuk membuat framework independen seperti yang dibutuhkan. Contohnya, jika kita hanya membutuhkan komponen cache yang dimiliki Phalcon, kita bisa menggunakannya di aplikasi apapun baik yang dibuat PHP atau menggunakan framework lain.
- Di sisi developer, mereka memounyai konsep MVC (Model-View-Controller) dan ORM (Object-Relational Modeling), bekerja dengan mudahnya dalam pemrograman Phalcon.

#### 1.1.1 Performance

Perbedaan Framework Phalcon dengan Framework Yii dan Laravel [1].

-	Yii	Laravel	Phalcon
Tipe dalam Proyek	forums portals	Laravel biasa digu- nakan untuk aplikasi berbasis web, laravel terkenal karena sin- taks nya yang sangat indah dan canggih	Phalcon diguakan untuk semua variasi proyek
Databa yang Men- dukung	semua RDBMS dan	Laravel mendukung semua RDBMS	Phalcon memberikan dukungan secara equal (sama) baik RDBMS maupun non-RDBMS
Bahasa Pem- ro- gra- man	Framework Yii menggunakan ba- hasa pemrograman PHP saja	Laravel meng- gunakan bahasa pemrograman PHP dan mengikuti pattern MVC	Phalcon meng- gunakan bahasa pemrograman PHP dan C
Keterja	Yii cukup baik di gunakan di skala angkauan proyek kecil ke menengah	Laravel punya keter- jangkauan yang tinggi dalam skala proyek	Phalcon cocok untuk proyek skala menen- gah
Perfor	m <b>S</b> edikit lambat	Performa tinggi na- mun masih dibawah Phalcon	Performa Tinggi

**1.1.1.1 This is the subsubsection** Here is some text after the subsubsection. Here is some text after the subsubsection. Here is some text after the subsubsection. Here is some text after the subsubsection.

*This is the paragraph* Here is some normal text. Here is some normal text. Here is some normal text.

#### 1.2 Tips On Special Section Heads

Here are some things you can do for a special section head.

# 1.3 Break Long Section heads with double backslash

Here is some normal text. Here is some normal text. Here is some normal text.

#### 1.4 Here is a Section Title

See this section head for information on how to explicitly break lines in table of contents.

#### 1.5 How to get lower case in section head: pH

Here is some normal text. Here is some normal text. Here is some normal text.

#### 1.6 How to use a macro that has both upper and lower case parts:

 $V_{Txyz}$ 

See the top of this file where the definition and box were set.

#### 1.7 Equation

For optimal vertical spacing, no blank lines before or after equations

$$\alpha\beta\Gamma\Delta$$
 (1.1)

as you see here.

#### **ENVIROMENTAL SETUP**

#### 2.1 Aplikasi yang dibutuhkan

Memerlukan XAMPP untuk instalasi Framework Phalcon.

- Step 1: Download Install lah file DLL (Dynamic Link Library) Phalcon di link https://phalconphp.com/en/download, sesuaikan file dll nya dengan konfigurasi versi XAMPP Anda.
- Step 2: Extract phalcon-php.dll file ke direktori /php/ext di folder XAMPP.
- Step 3: Edit file php.ini didalam folder /XAMPP/php/php.ini. Tambahkan "extension=php\_phalcon.dll" tanpa tanda kutip ke baris akhir php.ini. Sesuai dengan gambar 2.1
- Step 4: Setelah itu, cek di localhost/dashboard/phpinfo.php, akan terdaftar library phalcon disana.
- Step 5: Set Path Variable nya dengan menekan windows+R di keyboard, lalu ketikkan "sysdm.cpl SystemProperties" tanpa tanda kutip, masuk tab advance, lalu enviromental variables, klik new, dan masukkan path nya:



Figure 2.1 Apa yang harus di-edit di file php.ini

- Step 6: Path variable ini membantu Anda agar bisa menjalankan Phalcon Framework via cmd, terutama jika ingin membuat project yang baru:
- Step 7: Setelah masuk cmd, ketikkan command seperti di 2.1.

• Step 8: Project berhasil dibuat! masuk ke URL localhost/namaprojectanda

#### **CHAPTER 3**

# SECOND EDITED BOOK SAMPLE CHAPTER TITLE

George Smeal, Ph.D. $^1$ , Sally Smith, M.D. $^2$  and Stanley Kubrick $^1$ 

#### 3.1 Sample Section

Here is some sample text.

<sup>&</sup>lt;sup>1</sup>AT&T Bell Laboratories Murray Hill, New Jersey

<sup>&</sup>lt;sup>2</sup>Harvard Medical School, Boston, Massachusetts

#### 3.2 Example, Figure and Tables

#### **EXAMPLE 3.1 Optional Example Name**

Use Black's law [Equation (6.3)] to estimate the reduction in useful product life if a metal line is initially run at 55°C at a maximum line current density.

illustration here

Figure 3.1 Short figure caption.

**Figure 3.2** Oscillograph for memory address access operations, showing 500 ps address access time and superimposed signals of address access in 1 kbit memory plane.

Table 3.1		Small 7	Table
one	two	three	four
С	D	Е	F

**Table 3.2** Effects of the two types of  $\alpha\beta\sum_B^A$  scaling proposed by Dennard and co-workers  $^{a,b}$ 

Parameter	$\kappa$ Scaling	$\kappa, \lambda$ Scaling
Dimension	$\kappa^{-1}$	$\lambda^{-1}$
Voltage	$\kappa^{-1}$	$\kappa^{-1}$
Currant	$\kappa^{-1}$	$\lambda/\kappa^2$
Dopant Concentration	$\kappa$	$\lambda^2/\kappa$

aRefs. 19 and 20.

#### 3.2.1 Side by Side Tables and Figures

Space for figure...

Space for second figure...

**Figure 3.3** This caption will go on the left side of the page. It is the initial caption of two side-by-side captions.

**Figure 3.4** This caption will go on the right side of the page. It is the second of two side-by-side captions.

 $<sup>{}^{</sup>b}\kappa, \lambda > 1.$ 

9

```
Table 3.3
             Table Caption
                                            Table 3.4
                                                       Table Caption
              three
                                       Α
                                                 В
                                                             C
                                                                      D
one
      two
                        four
                                            second little sample
      little
             sample
                       table
                                                                    table
 a
                                       а
```

```
The command \sidebyside{} { } works similarly for tables:
```

When using \sidebyside, one must use the cross referencing command \label{} after and outside of \caption{}:

```
\begin{table}
 \sidebyside{\caption{Table Caption}\label{tab1}
 first table}
 {\caption{Table Caption}\label{tab2} second table}
 \end{table}
or,
 \begin{figure}
 \sidebyside{\vskip<dimen>\caption{fig caption}\label{fig1}}
 {\vskip<dimen>\caption{fig caption}\label{fig2}}
 \end{figure}
```

#### 3.3 Algorithm

This is a sample algorithm.

#### Algorithm 3.1

```
state_transition algorithm {
          for each neuron j \in \{0, 1, \dots, M-1\}
              calculate the weighted sum S_j using Eq. (6);
              if (S_j > t_j)
                       turn ON neuron; Y_1 = +1
              else if (S_j < t_j)
                       {turn OFF neuron; Y_1 = -1}
              else
                        {no change in neuron state; y_j remains unchanged;}
         }
}
```

Here is some normal text. Here is some normal text.

This is a sample of extract or quotation. This is a sample of extract or quotation. This is a sample of extract or quotation.

- 1. This is the first item in the numbered list.
- 2. This is the second item in the numbered list. This is the second item in the numbered list. This is the second item in the numbered list.
- This is the first item in the itemized list.
- This is the first item in the itemized list. This is the first item in the itemized list. This is the first item in the itemized list.

This is the first item in the itemized list.

This is the first item in the itemized list. This is the first item in the itemized list. This is the first item in the itemized list.

#### **PROBLEMS**

- **3.1** For Hooker's data, Problem 1.2, use the Box and Cox and Atkinson procedures to determine a appropriate transformation of PRES in the regression of PRES on TEMP. find  $\hat{\lambda}$ ,  $\tilde{\lambda}$ , the score test, and the added variable plot for the score. Summarize the results.
- **3.2** The following data were collected in a study of the effect of dissolved sulfur on the surface tension of liquid copper (Baes and Killogg, 1953).

	Y= Decrease in Surface Tension		
x = Weight % sulfur (dynes/cm), two Replicates			em), two Replicates
0.	034	301	316
0.	093	430	422
0.	30	593	586

- a) Find the transformations of X and Y sot that in the transformed scale the regression is linear.
- b) Assuming that X is transformed to  $\ln(X)$ , which choice of Y gives better results, Y or  $\ln(Y)$ ? (Sclove, 1972).
- c) In the case of  $\alpha_1$ ?

- d) In the case of  $\alpha_2$ ?
- **3.3** Examine the Longley data, Problem 3.3, for applicability of assumptions of the linear model.
- **3.4** In the case of  $\Gamma_1$ ?
- **3.5** In the case of  $\Gamma_2$ ?

#### **EXERCISES**

- **3.1** For Hooker's data, Exercise 1.2, use the Box and Cox and Atkinson procedures to determine a appropriate transformation of PRES in the regression of PRES on TEMP. find  $\hat{\lambda}$ ,  $\tilde{\lambda}$ , the score test, and the added variable plot for the score. Summarize the results.
- **3.2** The following data were collected in a study of the effect of dissolved sulfur on the surface tension of liquid copper (Baes and Killogg, 1953).

Y= Decrease in Surface Tension			
x = Weight % sulfur (dynes/cm), two Replicates			m), two Replicates
0.	034	301	316
0.	093	430	422
0.	30	593	586

- a) Find the transformations of X and Y sot that in the transformed scale the regression is linear.
- b) Assuming that X is transformed to ln(X), which choice of Y gives better results, Y or ln(Y)? (Sclove, 1972).
- c) In the case of  $\Delta_1$ ?
- d) In the case of  $\Delta_2$ ?
- **3.3** Examine the Longley data, Problem 3.3, for applicability of assumptions of the linear model.
- **3.4** In the case of  $\Gamma_1$ ?
- **3.5** In the case of  $\Gamma_2$ ?

#### 3.4 Summary

This is a summary of this chapter. Here are some references: [1], [4].

#### **REFERENCES**

- J. S. Kilby, "Invention of the Integrated Circuit," *IEEE Trans. Electron Devices*, ED-23, 648 (1976).
- 2. R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- 3. J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).
- 4. A. Berenbaum, B. W. Colbry, D.R. Ditzel, R. D Freeman, and K.J. O'Connor, "A Pipelined 32b Microprocessor with 13 kb of Cache Memory," it Int. Solid State Circuit Conf., Dig. Tech. Pap., p. 34 (1987).

#### Appendix: This is the Chapter Appendix Title

This is an appendix with a title.

$$\alpha\beta\Gamma\Delta$$
 (A.1)

**Figure 3-A.1** This is an appendix figure caption.

**Table 3-A.1** This is an appendix table caption

Date	Event
1867	Maxwell speculated the existence of electromagnetic waves.
1887	Hertz showed the existence of electromagnetic waves.
1890	Branly developed technique for detecting radio waves.
1896	Marconi demonstrated wireless telegraph.
1897	Marconi patented wireless telegraph.
1898	Marconi awarded patent for tuned communication.
1898	Wireless telegraphic connection between England and France established.

#### **Appendix**

This is a Chapter Appendix without a title.

Here is a math test to show the difference between using Computer Modern math fonts and MathTimes math fonts. When MathTimes math fonts are used the letters in an equation will match TimesRoman italic in the text. (g, i, y, x, P, F, n, f, etc.) Caligraphic fonts, used for  $\mathcal{ABC}$  below, will stay the same in either case.

$$g_i(y|f) = \sum_{x} P(x|F_n) f_i(y|x) \mathcal{ABC}$$
 (B.1)

where  $g_i(y|F_n)$  is the function specifying the probability an object will display a value y on a dimension i given  $F_n$  the observed feature structure of all the objects.

## APPENDIX A THIS IS THE APPENDIX TITLE

This is an appendix with a title.

$$\alpha\beta\Gamma\Delta$$
 (A.1)

**Figure A.1** This is an appendix figure caption.

 Table A.1
 Appendix table caption

Alpha	Beta	Gamma	Delta
$\alpha$	β	Γ	Δ

### **APPENDIX B**

This is an appendix without a title.

Here is a math test to show the difference between using Computer Modern math fonts and MathTimes math fonts. When MathTimes math fonts are used the letters in an equation will match TimesRoman italic in the text. (g, i, y, x, P, F, n, f, etc.) Caligraphic fonts, used for  $\mathcal{ABC}$  below, will stay the same in either case.

$$g_i(y|f) = \sum_x P(x|F_n)f_i(y|x)\mathcal{ABC}$$
 (B.1)

where  $g_i(y|F_n)$  is the function specifying the probability an object will display a value y on a dimension i given  $F_n$  the observed feature structure of all the objects.

# APPENDIX C ALTERNATE REFERENCE STYLES

### **REFERENCES**

- 1. Prokofyeva, Natalya and Boltunova, Victoria, "Analysis and Practical Application of PHP Frameworks in Development of Web Information Systems," *Procedia Computer Science*, **104**, 51–56 (2017).
- 2. R. W. Hamming, *Numerical Methods for Scientists and Engineers*, Chapter N-1, McGraw-Hill, New York, 1962.
- 3. J. Lee, K. Mayaram, and C. Hu, "A Theoretical Study of Gate/Drain Offset in LDD MOSFETs" *IEEE Electron Device Lett.*, **EDL-7**(3). 152 (1986).
- 4. A. Berenbaum, B. W. Colbry, D.R. Ditzel, R. D Freeman, and K.J. O'Connor, "A Pipelined 32b Microprocessor with 13 kb of Cache Memory," it Int. Solid State Circuit Conf., Dig. Tech. Pap., p. 34 (1987).

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