Preface

Photoshop software, which is a product of Adobe Corporation, is used for real image processing. Photoshop has strong ties with other Adobe software for media editing, animation, and authoring. Files in Photoshop's native format, .PSD, can be exported to and from Adobe Illustrator, Adobe Premiere Pro, After Effects, and Adobe Encore to make professional standard DVDs and provide non-linear editing and special effects services, such as backgrounds, textures, and so on, for television, film, and the Web. For example, Photoshop CC/CS6 broadly supports making menus and buttons for DVDs. For .PSD files exported as a menu or button, it only needs to have layers, nested in layer sets with a cuing format, and Adobe Encore DVD reads them as buttons or menus. Photoshop is a pixel-based image editor, unlike Adobe Illustrator which is a vector-based image editor. Photoshop can utilize the color models RGB, lab, CMYK, grayscale, binary bitmap, and duotone. Photoshop has the ability to read and write raster and vector image formats such as .EPS, .PNG, .GIF, .JPEG, and Fireworks. Additional feautres of Photoshop CC/CS6 such as: the ability to paint directly on 3D models, wrap 2D images around 3D shapes, convert gradient maps to 3D objects, add depth to layers and text, get print-quality output with the new ray-tracing rendering engine, and enjoy exporting to supported common 3D formats; the new Adjustment and Mask Panels; Content-aware scaling also known as seam carving; Fluid Canvas Rotation and File display options, makes it even more powerful.

With the help of this book, besides old users, new users can easily learn the techniques and working of this new software and create quality images. This book consists details of this software right from basics of image processing to the procedures of image editing, color separation and Printing. Use of new techniques of this version has been described in details which makes the construction of drawings easy and flexible.

It is sincerely hoped that this book will prove to be quite beneficial for all those who wish to learn the working of Adobe Photoshop CC and CS6. Comments and views from learned users and readers of this book are welcome for further improvement in next edition.

-Author

Contents

1. Adobe Photoshop CC/CS6: An Introduction 1-17

Warp perspective, Print 3D objects 1
3D imaging, Linked smart objects, Adobe Camera Raw 2
Other enhancements, Generate image assets from layers 3
Camera shake reduction improvements 3
Reduce camera shake blurring, Images suitable for camera shake reduction 4
Image resizing improvements, Share your work on Behance 5
Sync settings using Adobe Creative Cloud 5
3D painting, Available 3D painting methods 6
3D panel, Smart Sharpen filter enhancements 7
Minimum and Maximum filter enhancements 8
Adobe Camera Raw as a filter, Spot Removal tool, Radial Filter 8
Upright modes, Multiple selection of paths 9
Modify rectangles and rounded rectangles, Support for Indic languages 10
System anti-aliasing option for type 10
Warp perspective | Photoshop CC 11
Keyboard shortcuts 14
Print 3D objects | Photoshop CC 15
Preparing to print 3D objects 15
Previewing and printing the 3D object 16
3D print utilities 17

2. Create Smart Objects 18-32

Create embedded Smart Objects | CC, CS6 19
Create linked smart objects | Photoshop CC 19
Update linked Smart Objects 20
Resolve a broken smart object link 20
View linked smart object properties 20
Embed linked smart objects 21
Filter the Layers panel by smart objects 21
Duplicate an embedded smart object 21
Edit the contents of a Smart Object 21
Replace the contents of a Smart Object 22
Convert an embedded or linked Smart Object to a layer 22
Export the contents of an embedded Smart Object 22

Generate image assets from layers 22
Reduce camera shake blurring 25
Images suitable for camera shake reduction 25
Use automatic camera shake reduction 25
Share your work on Behance 28
Share an image on Behance 28
Sync settings using Adobe Creative Cloud 30
Sync settings 30
Manage Sync settings 30
Tool galleries 31

3. Workspace Basics 33-42

Manage windows and panels 35
Dock and undock panels 36
Move panels 36
Add and remove panels 36
Manipulate panel groups 37
Stack floating panels 37
Resize panels 37
Save and switch workspaces 38
Display or switch workspaces 38
Delete a custom workspace 38
Restore a saved workspace arrangement 38
Hide tool tips 38
Enter values in panels, dialog boxes, and Options bar 38
Working with sliders 39
Working with pop-up panels 39
Customize the list of items in a pop-up panel 40
Change the display of items in a pop-up panel 40
Delete a set of menus 41
Turn menu colors on or off 41
Setting the Preferences 41
Open a preferences dialog box 41
Disable and enable warning messages 42

4. Using Tools 43-70

Selection tools gallery, Crop and slice tools gallery 44
Retouching tools gallery 44
Painting tools gallery 45
Drawing and type tools gallery, Notes, measuring and navigation tools gallery 46
3D tools (Photoshop Extended), Use a tool 47
Cycle through hidden tools 48
Change tool pointers, Resize / change hardness of painting cursors by dragging 48
Using the options bar, Create and use tool presets 49
Change the screen mode, View another area of an image 50
Use the Rotate View tool, Use the Navigator panel 51
Magnify by dragging, Work with the Info panel 52
Display file information in the document window 53
Duplicate an image, Rulers, the grid, and guides, Change a ruler's zero origin 54
Position with guides and the grid 56

Use snapping, Work with the Preset Manager, Preferences 57
Plug-ins, Install a plug-in module 58
Undo and history panel, Work with the History panel 59
Create or replace a document with an image state 60
Make a snapshot of an image 60
Create a snapshot, Using the options bar 61
Create a tool preset, Change the list of tool presets 62
Use the Undo or Redo commands, Using the History panel 63
Delete one or more image states 64
Create or replace a document with an image state 65
Set history options, Make a snapshot of an image 65
Create a snapshot 66
Work with snapshots, Paint with a state or snapshot of an image 66
Specify columns for an image, Show or hide Extras 67
Run Photoshop in 32-bit mode 68
Using Rulers, Change a ruler's zero origin 68
Change the unit of measurement 69
Use snapping, Enable or disable snapping 70

5. File Placing in Other Applications 71-82
Use Photoshop artwork in Adobe Illustrator 72
Create transparency using image clipping paths 73
Printing image clipping paths 73
Export paths to Adobe Illustrator 74
Place a file in Photoshop 75
Place PDF or Illustrator files in Photoshop 77
Paste Adobe Illustrator art into Photoshop 77
Metadata and notes 78
Add notes 79
Position with guides and the grid 80
Show or hide a grid, guides, or smart guides, Place a guide 80
Move a guide, Companion apps 81
Photoshop connection settings 82

6. Using Images 83-104
Combining vector graphics and bitmap images 83
Color channels, Bit depth 84
Pixel dimensions and resolution, Display the current image size quickly 85
Monitor resolution 86
Printer resolution 87
Resampling 88
Change pixel dimensions of an image 89
Change the print dimensions and resolution 89
View the print size on-screen, Acquiring digital images from cameras 90
Import images from a digital camera using WIA (Windows only) 90
Importing scanned images, Create a image 91
Open files 92
Specify the file format in which to open a file, Open PDF files 93
Open an EPS file, Adobe Version Cue 95
Placing files, Place a file in Photoshop 96

High dynamic range images 97
Adjust dynamic range view for HDR images 99
Resizing images 100
Acquiring digital images from cameras 101
Change the screen mode 102
View another area of an image, Use the Rotate View tool 103
Automatically resize the window when zooming 104
View images in multiple windows 104

7. Image Processing 105-158

Crop images, Crop an image using the Crop tool 105
Crop an image using the Crop command 106
Crop an image using the Trim command, Transform perspective while cropping 107
Crop and Straighten photos 108
Rotate or flip an entire image 109
Change the canvas size 110
Make a frame, Clone Source panel, Retouch with the Clone Stamp tool 111
Set sample sources for cloning and healing 112
Scale or rotate the sample source, Retouch with the Healing Brush tool 113
Retouch with the Spot Healing Brush tool 114
Patch an area 115
Repair an area using a pattern, Remove red eye, Replace color in image areas 116
Smudge image areas, Blur image areas 117
Sharpen image areas, Dodge or burn areas, Adjust color saturation in image areas 118
Lens distortion, Correct lens distortion and adjust perspective 119
Correct image perspective and lens flaws, Reduce image noise and JPEG artifacts 121
Sharpen images 123
Sharpen using Unsharp Mask 124
Sharpen selectively, Sharpen a selection, Sharpen an image using an edge mask 126
Add lens blur, Apply transformations 128
Set or move the reference point for a transformation 131
Scale, rotate, skew, distort, apply perspective, or warp 131
Flip or rotate precisely, Repeat a transformation, Warp an item 132
Resize images and protect content 134
Liquify filter, Magnify or reduce the preview image 135
Navigate in the preview image 136
Freeze and thaw areas 138
Vanishing Point 141
Define the four corner nodes of the plane surface 144
Create panoramic images with Photomerge 152
High dynamic range images 155
Take photos for HDR images 156

8. Using Colors 159-174

Primary colors 159
The color wheel, Color models, spaces, and modes 160
Adjusting color hue, saturation, and brightness, RGB Color mode 161
CMYK Color mode, Lab Color mode, Grayscale mode, Bitmap mode 162
Duotone mode, Indexed Color mode, Multichannel mode 163
Convert an image to another color mode 163
Add a conditional mode change to an action 164

Convert a color photo to Grayscale mode, Convert an image to Bitmap mode 164
Convert a Bitmap mode image to Grayscale mode, Choosing colors 166
Choose colors in the toolbox, Choose colors with the Eyedropper tool 166
Adobe Color Picker overview 167
Display the Color Picker, Choose a color using the RGB model 168
Choose a color using the CMYK model, Choose web-safe colors 169
Choose a spot color, Color panel overview 169
Select a color in the Color panel, Add a color to the Swatches panel 170
Color management, What is a color management system? 171
Do you need color management? 171
Creating a viewing environment for color management 172
Printing with color management, Letting the application determine colors when printing 173
Color-managing PDFs for printing 173
Color profiles 174

9. Color and Tone 175-214

Histogram panel 176
View color values in an image 178
Adjusting color samplers 179
Correcting images 180
Adjustments panel overview 181
Change the gamut warning color 183
Using Levels Command, Adjust tonal range using Levels 184
Adjust color using Levels 186
Using Curves 186
Set Curve display options 188
Adjust color and tonality with Curves 188
Apply an Auto correction 190
Set black and white points using the eyedropper tools 190
Color correct using the eyedroppers 191
Adjust hue and saturation 191
Improve shadow and highlight detail 192
Add contrast to a photo 194
Targeting images for press 195
Using Levels to preserve highlight and shadow details for printing 195
Match the color in different images 197
Match the color between two images 197
Match the color of two layers in the same image 198
Remove a color cast with Match Color 200
Save and apply settings in the Match Color command 200
Replace the color of objects in an image 200
Mix color channels 202
Make selective color adjustments 203
Apply the Brightness/Contrast adjustment 204
Adjust black and white points with the Auto option 205
Apply the Auto Contrast adjustment 206
Remove a color cast using Auto Color 207
Set Auto adjustment options 208
Apply the Variations command 209
Using the Equalize command 210

Desaturate colors 211
Invert colors 211
Create a two-valued black and white image 211
Posterize an image 212
Apply a gradient map to an image 212
What is a color management system? 213

10. Create Drawings 215-237
Drawing modes 215
Create a shape on a shape layer 216
Draw multiple shapes in a layer, Draw a wheel shape 217
Draw a custom shape, Save a shape or path as a custom shape 218
Create a rasterized shape 218
Edit shapes, Shape tool options 219
Using Pen tools 220
Draw straight line segments with the Pen tool 221
Draw straight lines followed by curves 223
Draw curves followed by straight lines 224
Draw two curved segments connected by a corner 224
Draw with the Freeform Pen tool, Draw using the magnetic pen options 225
Paths panel, Select a path 226
Deselect a path, Change the size of path thumbnails 227
Change a path's stacking order, Create a new path in the Paths panel 227
Create a new work path, Manage paths 227
Save a work path, Rename a saved path, Delete a path 228
Path segments, components, and points, Select a path 230
Adjust path segments, Move straight segments 230
Delete a segment 231
Delete the handle of an anchor point, Extend an open path 232
Connect two open paths, Move or nudge anchor points or segments using the keyboard .. 232
Adjust path components 232
Change the overlap mode for the selected path component 233
Show or hide the selected path component 233
Move a path or path component, Reshape a path component 234
Merge overlapping path components, Copy a path component or path 234
Delete a path component, Align and distribute path components 235
Add or delete anchor points 235
Add or delete anchor points 236
Convert a selection to a path, Fill paths with color 236
Stroke paths with color, Stroke a path using the current Stroke Path options 237
Stroke a path and specify options 237

11. Image Painting 238-264
Brush and tool presets, Brush tip options 238
Paint with the Brush tool or Pencil tool, Paint tool options 239
Paint with a pattern 239
Paint with the Art History Brush 240
Erase with the Eraser tool, Change similar pixels with the Magic Eraser tool 241
Change pixels to transparent with the Background Eraser tool 242
Auto Erase with the Pencil tool 242
Changing the brush cursor, Brush presets 243

Select a preset brush, Change how preset brushes are displayed 244
Change the preset brushes displayed in the panel 244
Save a set of preset brushes as a library 244
Rename a preset brush, Delete a preset brush, Create a new preset brush 245
Creating and modifying brushes, Brushes panel 245
Display the Brushes panel and brush options, Create a brush tip from an image 246
Brush tip shape options 247
Adding brush dynamics 249
Brush shape dynamics 250
Brush scattering, Textured brush options 251
Dual brushes 252
Color dynamics Brush options, Clear brush options 253
Blending modes, List of blending modes 254
Blending mode examples 256
Gradient fill, Save a set of preset gradients as a library 258
Load a library of preset gradients, Gradient Editor 259
Create a smooth gradient, Specify the gradient transparency 260
Create a noise gradient 261
Fill with the Paint Bucket tool, Fill a selection with a pattern 262
Draw a circle or square, Correct lens distortion and adjust perspective 263
Adjust the Lens Correction preview and grid 264

12. Image Selection 265-298

Select, deselect, and reselect pixels 265
Select all pixels on a layer within the canvas boundaries 265
Deselect selections 266
Reselect the most recent selection 266
Select with the marquee tools 266
Select with the Lasso tool, Select with the Polygonal Lasso tool 268
Select with the Magnetic Lasso tool 269
Select with the Quick Selection tool 270
Select with the Magic Wand tool 272
Select a color range 272
Move, hide, or invert a selection 274
Move a selection border 274
Control the movement of a selection 275
Hide or show selection edges 275
Select the unselected parts of an image 275
Adjust selections manually 275
Add to a selection or select an additional area 275
Subtract from a selection 275
Select only an area intersected by other selections 275
Expand or contract a selection by a specific number of pixels 276
Create a selection around a selection border 276
Expand a selection to include areas with similar color 277
Clean up stray pixels in a color-based selection 277
Refine selection edges 277
Soften the edges of selections 278
Select pixels using anti-aliasing 278
Define a feathered edge for a selection tool 278

Define a feathered edge for an existing selection 279
Remove fringe pixels from a selection 279
Decrease fringe on a selection 280
Remove a matte from a selection 280
Move a selection 280
Copy selections 280
Copy a selection 281
Copy a selection while dragging 281
Create multiple copies of a selection within an image 281
Paste one selection into another 282
Copy between applications 283
Paste PostScript artwork from another application 283
Save clipboard contents when you quit Photoshop 284
Copy artwork by dragging and dropping 284
Remove (cut) an object from a photo 284
Delete selected pixels 284
Channels 284
Channels panel overview 285
Display the Channels panel 285
Resize or hide channel thumbnails 286
Show or hide a channel 286
Show color channels in color 286
Select and edit channels 286
Rearrange and rename alpha and spot channels 287
Duplicate channels 287
Duplicate a channel in an image 287
Duplicate a channel in another image 287
Split channels into separate images 288
Merge channels 288
Delete a channel 288
Masks and alpha Channels 289
Create a temporary quick mask 290
Change Quick Mask options 292
Create an alpha channel mask using current options 292
Create an alpha channel mask and set options 292
Channel options 293
Paint on a channel to mask image areas 293
Save and load selections 293
Save a selection to a new channel 293
Save a selection to a new or existing channel 293
Load a saved selection from the Channels panel 294
Load a saved selection 295
Blending layers and channels 296
Blend channels with the Apply Image command 296
Blend channels with the Calculations command 297
Add and Subtract blending modes 298

13. Working with Layers 299-334

Work non-destructively 299
Organize layers 300

Video layers 300
Layers panel, Display the Layers panel 300
Convert background and layers 301
Convert a background into a layer 301
Convert a layer into a background 301
Create layers and groups 301
Create a new layer with effects from another layer 301
Convert a selection into a new layer 301
Duplicate a layer or group within an image 301
Duplicate a layer or group between images 302
Create a new document from a layer or group 302
Show or hide a layer, group, or style, View layers and groups within a group 302
Sample from all visible layers 303
Change transparency preferences, Select layers 303
Select layers in the Layers panel, Select layers in the document window 303
Select a layer in a group 304
Group and ungroup layers 304
Show layer edges and handles 304
Move the content of layers, Blend layers, Rotate a layer 306
Lock layers, Lock all properties of a layer or group 306
Rename a layer or group, Assign a color to a layer or group 306
Rasterize layers, Delete a layer or group 307
Export layers, Track file size, Merge and stamp layers 307
Merge two layers or groups, Merge layers in a clipping mask 308
Merge all visible layers and groups in an image 308
Stamp multiple layers or linked layers 308
Stamp all visible layers 308
Flatten all layers 308
Specify opacity for a layer or group 309
Specify fill opacity for a layer 309
Specify a blending mode for a layer or group 309
Filling new layers with a neutral color 310
Create a knockout 310
Exclude channels from blending 312
Group blend effects 312
Layer effects and styles 313
Apply preset styles 314
Apply a preset style to a layer 314
Apply a style from another layer 315
Change how preset styles are displayed 315
Layer Style dialog box 315
Apply or edit a custom layer style 316
Layer style options 316
Modify layer effects with contours 318
Create a custom contour 319
Load a contour, Delete a contour 319
Set a global lighting angle for all layers 319
Expand or collapse layer styles in the Layers panel 319
Copy layer styles between layers 320

Scale a layer effect 320
Remove layer effects 320
Remove an effect from a style 320
Remove a style from a layer 320
Adjustment and fill layers 320
Create adjustment and fill layers 321
Create an adjustment layer 322
Create a fill layer 322
Change adjustment and fill layer options 323
Nondestructive editing 323
Smart Objects 324
Create Smart Objects 325
Duplicate a Smart Object 325
Edit the content of a Smart Object 325
Smart Filters 325
Apply a Smart Filter 326
Edit a Smart Filter 326
Edit Smart Filter settings 326
Delete Smart Filters 327
Layer comps 327
Create a layer comp 328
Apply and view layer comps 328
Change and update a layer comp 328
Delete a layer comp 328
Masking layers 328
Add a mask that shows or hides the entire layer 330
Add a layer mask that hides part of a layer 330
Apply a layer mask from another layer 331
Change mask density 331
Feather mask edges 331
Refine mask edges 331
Create an adjustment layer mask using a color range 331
Select and display the layer mask channel 332
Disable or enable a layer mask 332
Add a vector mask that shows the contents of a shape 332
Edit a vector mask 332
Change vector mask opacity or feather mask edges 332
Remove a vector mask 333
Disable or enable a vector mask 333
Apply or delete a layer mask 333
Mask layers with clipping masks 333
Create a clipping mask 334
Remove a layer from a clipping mask 334
Release all layers in a clipping mask 334

14. Working with Text 335-352

Type and type layers, Entering type 335
Enter point type, Enter paragraph type 336
Resize or transform a type bounding box 337
Convert between point type and paragraph type, Edit text 338

Specify curly or straight quotes, Apply anti-aliasing to a type layer 339
Change the orientation of a type layer, Rasterize type layers 340
Select characters 340
Character panel, Dynamic Shortcuts 341
Specify type size, Choose a type size 342
Define the point size unit, Change the type color 343
Change the color of individual letters, Using Fonts 343
Choose a font family and style 344
Change the font on multiple layers, Set leading 345
Set the leading, Change the default auto leading percentage 345
Kern and track 345
Adjust kerning, Adjust tracking, Shift the baseline 346
Turn fractional character widths off or on 347
Scale of type, Rotate type 347
Rotate vertical type characters, Paragraph panel 348
Indent paragraphs, Adjust paragraph spacing 349
Prevent words from breaking, Create and edit type on a path 349
Enter type along a path, Move or flip type on a path 350
Move a path with type, Change the shape of a path with type 351
Warp and unwarp type, Warp type, Unwarp type 352
Convert type to shapes 352
Add a drop shadow to text 352

15. Working with Filters 353-362
Apply a filter from the Filter menu 354
Filter Gallery 355
Display the Filter Gallery 355
Zoom in or out of the preview 355
View another area of the preview 355
Hide filter thumbnails 355
Apply filters from the Filter Gallery 355
Blend and fade filter effects 356
Tips for creating special effects 356
Improve filter performance 357
Artistic filters 358
Blur filters 359
Brush Stroke filters 360
Distort filters 361
Noise filters 361
Adaptive wide angle filter 361
Oil Paint filter 362

16. Image Printing 363-372
Desktop printing 363
Print images 364
Set Photoshop print options and print 364
Set page setup options 365
Reposition an image on the paper 365
Scale the print size of an image 366
Print part of an image 366

Preparing images for press 366
Set output options 367
Selecting halftone screen attributes 369
Define the attributes of a halftone screen 369
Print separations from Photoshop 370
Prepare an image with spot channels for printing from another application 371
Determine scan resolution for printing 371
Estimate scan resolution 371
Calculate the file size before scanning an image 372
Convert an image to duotone 372
Adjust the display of overprint colors 372

17. Web Graphics 373-392

Creating rollover images 373
Working with hexadecimal color values 374
View hexadecimal color values in the Info panel 374
Copy a color as a hexadecimal value, Slicing web pages 374
Slice types, Slice a web page, Create a slice with the Slice tool 375
Create slices from guides 376
Create a slice from a layer 376
Convert auto and layer-based slices to user slices 376
Show or hide slice boundaries 376
Show or hide auto slices 376
Show or hide slice numbers 376
Change the color of slice lines 376
Select one or more slices 377
Move or resize a user slice 377
Resize or move a user slice using numeric coordinates 377
Snap slices to a guide, user slice, or other object 377
Duplicate slices 377
Copy and paste a slice, Combine slices 378
Delete a slice, Lock all slices 378
Display the Slice Options dialog box, Specify a slice content type 379
Rename a slice, Choose a background color for a slice 379
Add HTML text to a slice 379
Creating web photo galleries 380
Making sure that your colors match 381
Web photo gallery styles 381
Customize or create a web photo gallery style 382
Optimizing images 382
Save for Web & Devices 382
Photoshop Save As and Image Processor 382
Save For Web & Devices 383
Preview images in the dialog box 383
Navigate in the dialog box 383
View optimized image information and download time 384
Optimize an image for the web 384
Work with slices in the Save For Web & Devices dialog box 385
Compress a web graphic to a specific file size 385
Resize artwork while optimizing 386

Preview optimized images in a web browser 386
Save a file to e-mail, Output settings for web graphics 386
Background output settings, Saving Files output settings 387
Include title and copyright information with an image, Web graphic formats 388
Optimize transparency in GIF and PNG images 388
Customize the color table for GIF and PNG-8 images 388
Sort a color table, Add a new color to the color table 389
Select colors in the color table, Shift a color 389
Shift colors to the closest web palette equivalent 390
Map colors to transparency 390
Lock or unlock a color 391
Delete selected colors, Save a color table 391
Load a color table 392
PNG-24 optimization options 392
WBMP optimization options 392

18. Video and Animation 393-400

Create a Video Group 393
Edit a Video Group 393
Audio tracks and controls 393
Adjust audio in clips 393
Create or delete audio tracks 393
Add, duplicate, delete, or replace audio clips 394
Video transitions 394
Change video clip duration and speed 394
Apply filters to video layers 394
Apply motion effects to text, still images, and Smart Objects 394
Import a wider range of file formats 394
Export final video with the Adobe Media Encoder 394
Transform video layers 395
Create new video layers 395
Open a video file 395
Add a video file as a new video layer 395
Add a blank video layer 395
Specify when a layer appears in a video or animation 395
Trim or move a video layer 396
Lift work area 396
Extract work area 397
Split video layers 397
Group layers in a video or animation 397
Rasterize video layers 398
Preview a frame animation 398
Set the timeline area to preview 398
Previewing video or timeline animations 399
Preview a video or timeline animation 399
Preview audio for video layers 399
Enable frame skipping 399
Preview your document on a video monitor 399
Import image sequences 400

Appendix: Glossary 401-408