***Apache Isis Annotations***

**<http://isis.apache.org/documentation.html>**

***Apache Isis™ CheatSheet***

@DomainService @DomainServiceLayout

@DomainObject @DomainObjectLayout

@ViewModel, @ViewModelLayout

@Property, @PropertyLayout

@Collection, @CollectionLayout

@Action , @ActionLayout

@Parameter, @ParameterLayout

@Title, @MemberOrder, @MemberGroupLayout

@HomePage, @MinLength, @Programmatic

*Xxx.layout.xml* instead of @XxxLayout

***JDO (DataNucleus) Annotations***

@PersistenceCapable, @DatastoreIdentity

@Inheritance, @Discriminator; @Version

@Queries, @Query;

@Uniques, @Unique; @Indices, @Index

@Persistent, @NotPersistent

@Column, @PrimaryKey,@Join, @Element

<http://www.datanucleus.org/products/datanucleus/jdo/annotations.html>

***Other Annotations***

@javax.enterprise.context.RequestScoped

@javax.inject.Inject

@javax.annotation.PostConstruct

@javax.annotation.PreDestroy

@javax.validation.constraints.Digits

@javax.xml.bind.annotation.XmRootElement etc.

@com.google.common.eventbus.Subscribe

@org.axonframework.eventhandling.annotation.EventHandler

***Methods: Class***

title(), iconName(), cssClass()

hidden, disabled(IdentifierType), validate()

***Methods: Properties***

getName(), setName(); modifyName(), clearName()

hideName(); disableName(); validateName()

autoCompleteName(), choicesName()

***Methods: Collections***

getOrders(); {addTo/removeFrom}Orders()

hideOrders(); disableOrders();

validate{AddTo/RemoveFrom}Orders

***Methods: Actions***

placeOrder(X x, Y y, Z z)

hidePlaceOrder(); disablePlaceOrder()

validate{0|1|2}PlaceOrder(X|Y|Z);

validatePlaceOrder(X x, Y y, Z z)

autoComplete{0|1|2}PlaceOrder(X,Y)

choices{0|1|2}PlaceOrder(X,Y) (n-1 args) default{0}PlaceOrder()

***RepositoryService***

allMatches(Query) & QueryDefault(…), persist(), remove(), instantiate()

***MessageService***

informUser(), warnUser(), raiseError()

***Error & Exception Handling***

RecoverableException, NonRecoverableExeption

***(some other) Applib Services (API, fwk implements)***

**v1.12.0**

FactoryService, TitleService, DomainObjectContainer, ClockService, ConfigurationService, BookmarkService, JaxbService, EventBusService, BackgroundService

EmailService, MetaModelService,

IsisJdoSupport, WrapperFactory TranslationService,

}

request
scoped

CommandContext, ActionInvocationContext

QueryResultsCache, Scratchpad,

***(some) Applib Services (SPI, Isis addons impl.)***

AuditingService3 (isis-module-audit); CommandService & BackgroundCommandService (isis‑module-command);

Security services (isis-module-settings)

SessionLoggingService (isis-module-sessionlogger),

***Applib Services (SPI, no impl., app must provide)***

FixtureScripts, UserProfileService, UserRegistrationService

***Other Add-ons* (**[**http://www.isisaddons.org**](http://www.isisaddons.org)**)**

*isis-module-xxx*: docx; excel; settings; stringinterpolator;

*isis-wicket-xxx*: excel; fullcalendar2; gmap3

***Mixins (fwk implements)***

clearHints(), downloadLayout(), id & version properties

***Value Types***

8 primitive types + wrappers; BigDecimal, BigInteger; java.util.Date, java.sql.{Date|Time|Timestamp}; enums; JODA dates; org.apache.isis.value.\*

***Applib Utility Classes***

ObjectContracts, Enums; TranslatableString

***Config Files***

WEB-INF/isis.properties, WEB-INF/shiro.ini