

Domain Objects (entities + view models)

@DomainObject @DomainObjectLayout
@ViewModel, @ViewModelLayout
@Property, @PropertyLayout
@Collection, @CollectionLayout
@Action, @ActionLayout
@Parameter, @ParameterLayout
@Title, @MemberOrder, @MemberGroupLayout
@HomePage, @MinLength, @Programmatic
@javax.inject.Inject – inject services into object
@javax.annotation.Nullable
@javax.validation.constraints.Digits

@lombok.Data; @lombok.Builder;
@lombok.AllArgsConstructor

Layout

Xxx.layout.xml is more flexible than @XxxLayout
title(), iconName(), cssClass(), layout()

Domain Entities (javax.jdo.annotation)

@PersistenceCapable, @DatastoreIdentity
@Inheritance, @Discriminator; @Version
@Queries, @Query;
@Uniques, @Unique; @Indices, @Index
@Persistent, @NotPersistent
@Column, @PrimaryKey, @Join, @Element
@XmlJavaTypeAdapter(PersistentEntityAdapter.class)
www.datanucleus.org/products/datanucleus/jdo/annotations.html

JAXB View Models (javax.xml.bind.annotation)

@XmlRootElement; @XmlType
@XmlAccessorType; @XmlTransient

Domain Services (Menu or REST API)

@DomainService @DomainServiceLayout
@Action, @MemberOrder (not props or colls)
@PostConstruct; @PreDestroy (javax.annotation)
@javax.inject.Inject – inject services into service

Domain Services (Programmatic)

@org.springframework.stereotype.Component
@org.springframework.stereotype.Service
@org.springframework.context.event.EventListener

Layout

menubars.layout.xml is more flexible than
@DomainServiceLayout and @MemberOrder

Mixins

@Mixin ; 1-arg constructor of the mixee
Mixin props or colls must have 0 arguments, and
annotated with @Action(semantic=SAFE) and
@ActionLayout(contributed=AS_ASSOCIATION)

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()

Methods: Properties

@lombok.Getter, @lombok.Setter;
getName(), setName();
hideName(); disableName(); validateName()
autoCompleteName(), choicesName()

Methods: Collections

@lombok.Getter, @lombok.Setter;
getOrders(); hideOrders(); disableOrders();

Events

@DomainObject(xxxLifecycleEvent=....)
@DomainObjectLayout(xxxUiEvent=....)
@Action(domainEvent=....) @Property(domainEvent=...)
@Collection(domainEvent=...)

RepositoryService

allMatches(Query) & QueryDefault(...), persist(), remove()

MessageService

informUser(), warnUser(), raiseError()

(some) other Applib Services

FactoryService, TitleService, ClockService,
ConfigurationService, BookmarkService, EventBusService,
BackgroundService, MetaModelService, IsisJdoSupport,
WrapperFactory, CommandContext, QueryResultsCache

Error & Exception Handling

RecoverableException, NonRecoverableException

Value Types

8 primitive types + wrappers; BigDecimal, BigInteger;
java.util.Date, java.time.{LocalDate|LocalDateTime|
LocalTime} dates; JODA dates; java.sql.{Date|Time|
Timestamp}; enums; value types library

Bootstrapping

@SpringBootApplication; @SpringBootTest;
@Configuration; @Import; @ComponentScan