

```
- log: Logger = Logger.getLogge...
# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
# populateBean(HttpServletRequest): BaseBean
```

```
+ OP_RESET: String = "Reset" {readOnly}
+ OP_SAVE: String = "Save" {readOnly}
+ OP_SEARCH: String = "Search" {readOnly}
+ OP_VIEW: String = "View" {readOnly}

+ BaseCtl()
# getView(): String
# populateBean(HttpServletRequest): BaseBean
# populateDTO(BaseBean, HttpServletRequest): BaseBean
# preload(HttpServletRequest): void
# service(HttpServletRequest, HttpServletResponse): void
# validate(HttpServletRequest): boolean
```

```
StudentListCtl

- log: Logger = Logger.getLogge...

# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
# populateBean(HttpServletRequest): in.co.student.enrollment.sys.bean.BaseBean
```

```
WelcomeCtl

- log: Logger = Logger.getLogge...
- serialVersionUID: long = 1L {readOnly}

# doGet(HttpServletRequest, HttpServletResponse): void
# getView(): String
```

```
ForgotPasswordCtl

- log: Logger = Logger.getLogge...
- serialVersionUID: long = 1L {readOnly}

# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
# populateBean(HttpServletRequest): BaseBean
# validate(HttpServletRequest): boolean
```

```
MyProfileCtl

- log: Logger = Logger.getLogge...
+ OP_CHANGE_MY_PASSWORD: String = "ChangePassword" {readOnly}
+ OP_CHANGE_MY_PROFILE: String = "Change My Profile" {readOnly}
- serialVersionUID: long = 1L {readOnly}

# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
# populateBean(HttpServletRequest): BaseBean
# validate(HttpServletRequest): boolean
```

```
«interface»
SESView

+ APP_CONTEXT: String = "/StudentEnroll...
+ CHANGE_PASSWORD_CTL: String = APP_CONTEXT + "...
+ CHANGE_PASSWORD_VIEW: String = PAGE_FOLDER + "...
+ COURSE_CATEGORY_CTL: String = APP_CONTEXT + "...
+ COURSE_CATEGORY_LIST_CTL: String = APP_CONTEXT + "...
+ COURSE_CATEGORY_LIST_VIEW: String = PAGE_FOLDER + "...
+ COURSE_CATEGORY_VIEW: String = PAGE_FOLDER + "...
+ COURSE_CTL: String = APP_CONTEXT + "...
+ COURSE_LIST_CTL: String = APP_CONTEXT + "...
+ COURSE_LIST_VIEW: String = PAGE_FOLDER + "...
+ COURSE_VIEW: String = PAGE_FOLDER + "...
+ ENROLL_CTL: String = APP_CONTEXT + "...
+ ENROLL_LIST_CTL: String = APP_CONTEXT + "...
+ ENROLL_LIST_VIEW: String = PAGE_FOLDER + "...
+ ENROLL_VIEW: String = PAGE_FOLDER + "...
+ ERROR_CTL: String = "/ctl/ErrorCtl"
+ ERROR_VIEW: String = PAGE_FOLDER + "...
+ FORGET_PASSWORD_CTL: String = APP_CONTEXT + "...
+ FORGET_PASSWORD_VIEW: String = PAGE_FOLDER + "...
+ LOGIN_CTL: String = APP_CONTEXT + "...
+ LOGIN_VIEW: String = PAGE_FOLDER + "...
+ LOGOUT_CTL: String = APP_CONTEXT + "...
+ MY_PROFILE_CTL: String = APP_CONTEXT + "...
+ MY_PROFILE_VIEW: String = PAGE_FOLDER + "...
+ PAGE_FOLDER: String = "/jsp"
+ STUDENT_LIST_CTL: String = APP_CONTEXT + "...
+ STUDENT_LIST_VIEW: String = PAGE_FOLDER + "...
+ USER_CTL: String = APP_CONTEXT + "...
+ USER_LIST_CTL: String = APP_CONTEXT + "...
+ USER_LIST_VIEW: String = PAGE_FOLDER + "...
+ USER_REGISTRATION_CTL: String = APP_CONTEXT + "...
+ USER_REGISTRATION_VIEW: String = PAGE_FOLDER + "...
+ USER_VIEW: String = PAGE_FOLDER + "...
+ WELCOME_CTL: String = APP_CONTEXT + "...
+ WELCOME_VIEW: String = PAGE_FOLDER + "...
```

```
UserRegistrationCtl

- log: Logger = Logger.getLogge...
+ OP_SIGN_UP: String = "SignUp" {readOnly}
- serialVersionUID: long = 1L {readOnly}

# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
# populateBean(HttpServletRequest): BaseBean
+ UserRegistrationCtl()
# validate(HttpServletRequest): boolean
```

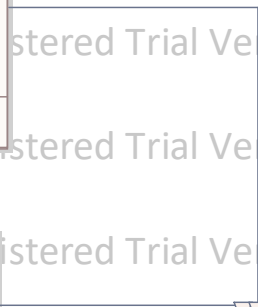
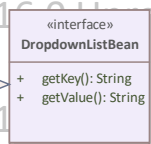
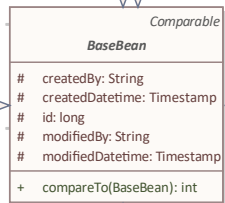
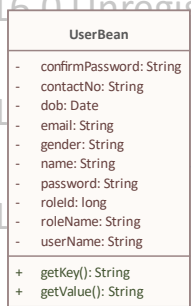
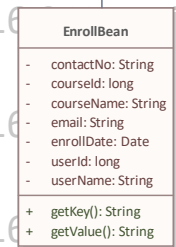
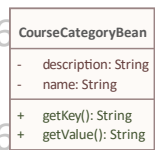
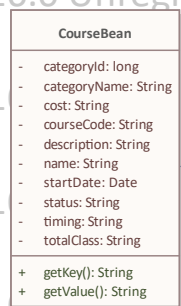
```
LoginCtl

+ HIT_URI: String = null
- log: Logger = Logger.getLogge...
+ OP_LOG_OUT: String = "logout" {readOnly}
+ OP_REGISTER: String = "Register" {readOnly}
+ OP_SIGN_IN: String = "SignIn" {readOnly}
+ OP_SIGN_UP: String = "SignUp" {readOnly}
- serialVersionUID: long = 1L {readOnly}

# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
+ LoginCtl()
# populateBean(HttpServletRequest): BaseBean
# validate(HttpServletRequest): boolean
```

```
+ OP_SIGN_IN: String = "SignIn" {readOnly}
+ OP_SIGN_UP: String = "SignUp" {readOnly}
- serialVersionUID: long = 1L {readOnly}

# doGet(HttpServletRequest, HttpServletResponse): void
# doPost(HttpServletRequest, HttpServletResponse): void
# getView(): String
+ LoginCtrl()
# populateBean(HttpServletRequest): BaseBean
# validate(HttpServletRequest): boolean
```



```

class DataUtility {
+ APP_DATE_FORMAT: String = "MM/dd/yyyy" (readOnly)
- formatter: SimpleDateFormat = new SimpleDateFormat... (readOnly)

+ getCurrentTimestamp(): Timestamp
+ getDate(String): Date
+ getDate(Date, int): Date
+ getDate1(String): Date
+ getDateString(Date): String
+ getInt(String): int
+ getLong(String): long
+ getString(String): String
+ getStringData(Object): String
+ getTimestamp(long): Timestamp
+ getTimestamp(String): Timestamp
+ getTimestamp(Timestamp): long
}

```

```

class DataValidator {
+ isDate(String): boolean
+ isEmail(String): boolean
+ isInteger(String): boolean
+ isLong(String): boolean
+ isName(String): boolean
+ isNotNull(String): boolean
+ isNull(String): boolean
+ isPassword(String): boolean
+ isPhoneNo(String): boolean
}

```

```

class HTMLUtility {
+ getList(String, String, HashMap<String, String>): String
+ getList(String, String, List): String
}

```

```

class JDBCDataSource {
- cpds: ComboPooledDataSource = null
- datasource: JDBCDataSource

+ closeConnection(Connection): void
+ getConnection(): Connection
+ getInstance(): JDBCDataSource
- JDBCDataSource()
- trnRollback(Connection): void
}

```

```

class PropertyReader {
- rb: ResourceBundle = ResourceBundle....

+ getValue(String): String
+ getValue(String, String): String
+ getValue(String, String[]): String
+ main(String[]): void
}

```

```

class ServletUtility {
+ forward(String, HttpServletRequest, HttpServletResponse): void
+ getBean(HttpServletRequest): BaseBean
+ getErrorMessage(String, HttpServletRequest): String
+ getErrorMessage(HttpServletRequest): String
+ getList(HttpServletRequest): List
+ getMessage(String, HttpServletRequest): String
+ getOperation(HttpServletRequest): String
+ getPageNo(HttpServletRequest): int
+ getPageSize(HttpServletRequest): int
+ getParameter(String, HttpServletRequest): String
+ getSize(HttpServletRequest): int
+ getSuccessMessage(HttpServletRequest): String
+ handleException(Exception, HttpServletRequest, HttpServletResponse): void
+ redirect(String, HttpServletRequest, HttpServletResponse): void
+ setBean(BaseBean, HttpServletRequest): void
+ setErrorMessage(String, HttpServletRequest): void
+ setList(List, HttpServletRequest): void
+ setOperation(String, HttpServletRequest): void
+ setPageNo(int, HttpServletRequest): void
+ setPageSize(int, HttpServletRequest): void
+ setSize(int, HttpServletRequest): void
+ setSuccessMessage(String, HttpServletRequest): void
}

```

CourseCategoryModel
- log: <a href="#">Logger = Logger.getLogge...</a>
+ add(CourseCategoryBean): long + delete(CourseCategoryBean): void + findByName(String): CourseCategoryBean + findByPK(long): CourseCategoryBean + list(): List<CourseCategoryBean> + list(int, int): List<CourseCategoryBean> + nextPK(): Integer + search(CourseCategoryBean): List<CourseCategoryBean> + search(CourseCategoryBean, int, int): List<CourseCategoryBean> + update(CourseCategoryBean): void

CourseModel
- log: <a href="#">Logger = Logger.getLogge...</a>
+ add(CourseBean): long + delete(CourseBean): void + findByCourseName(String): CourseBean + findByPK(long): CourseBean + list(): List<CourseBean> + list(int, int): List<CourseBean> + nextPK(): Integer + search(CourseBean): List<CourseBean> + search(CourseBean, int, int): List<CourseBean> + update(CourseBean): void

EnrollModel
- log: <a href="#">Logger = Logger.getLogge...</a>
+ add(EnrollBean): long + delete(EnrollBean): void + findByCourseIdAndUserId(long, long): EnrollBean + findByName(String): EnrollBean + findByPK(long): EnrollBean + list(): List<EnrollBean> + list(int, int): List<EnrollBean> + nextPK(): Integer + search(EnrollBean): List<EnrollBean> + search(EnrollBean, int, int): List<EnrollBean> + update(EnrollBean): void

UserModel
- log: <a href="#">Logger = Logger.getLogge...</a>
+ add(UserBean): long + authenticate(String, String): UserBean + changePassword(Long, String, String): boolean + delete(UserBean): void + findByPK(long): UserBean + findByUsername(String): UserBean + forgetPassword(String): String + list(): List<UserBean> + list(int, int): List<UserBean> + nextPK(): Integer + registerUser(UserBean): long + search(UserBean): List<UserBean> + search(UserBean, int, int): List<UserBean> + update(UserBean): void + updateAccess(UserBean): UserBean

DataUtility
+ APP DATE FORMAT: String = "MM/dd/yyyy" {readOnly} - formatter: SimpleDateFormat = new SimpleDateF... {readOnly}
+ getCurrentTimestamp(): Timestamp + getDate(String): Date + getDate(Date, int): Date + getDate1(String): Date + getDateString(Date): String + getInt(String): int + getLong(String): long + getString(String): String + getStringData(Object): String + getTimestamp(long): Timestamp + getTimestamp(String): Timestamp + getTimestamp(Timestamp): long

DataValidator
+ isDate(String): boolean + isEmail(String): boolean + isInteger(String): boolean + isLong(String): boolean + isName(String): boolean + isNotNull(String): boolean + isNull(String): boolean + isPassword(String): boolean + isPhoneNo(String): boolean

HTMLUtility
+ getList(String, String, HashMap<String, String>): String + getList(String, String, List): String

JDBCDataSource
- cpds: ComboPooledDataSource = null - datasource: JDBCDataSource
+ closeConnection(Connection): void + getConnection(): Connection + getInstance(): JDBCDataSource - JDBCDataSource() + trnRollback(Connection): void

PropertyReader
- rb: ResourceBundle = ResourceBundle...
+ getValue(String): String + getValue(String, String): String + getValue(String, String[]): String + main(String[]): void

ServletUtility
+ forward(String, HttpServletRequest, HttpServletResponse): void + getBean(HttpServletRequest): BaseBean + getErrorMessage(String, HttpServletRequest): String + getErrorMessage(HttpServletRequest): String + getList(HttpServletRequest): List + getMessage(String, HttpServletRequest): String + getOperation(HttpServletRequest): String + getPageNo(HttpServletRequest): int + getPageSize(HttpServletRequest): int + getParameter(String, HttpServletRequest): String + getSize(HttpServletRequest): int + getSuccessMessage(HttpServletRequest): String + handleException(Exception, HttpServletRequest, HttpServletResponse): void + redirect(String, HttpServletRequest, HttpServletResponse): void + setBean(BaseBean, HttpServletRequest): void + setErrorMessage(String, HttpServletRequest): void + setList(List, HttpServletRequest): void + setOperation(String, HttpServletRequest): void + setPageNo(int, HttpServletRequest): void + setPageSize(int, HttpServletRequest): void + setSize(int, HttpServletRequest): void + setSuccessMessage(String, HttpServletRequest): void



