HIGH LEVEL DESIGN DOCUMENT OF DIGITAL SIGNATURES FOR MOBILE USERS (Server)

Controller

Classes

- 1. TrustCodeVerification
- 2. SignatureController
- 3. UserController
- 4. CertificateController
- 5. DocumentController

Controller Interface

1. SocketStringConstants

Socket classes

- 1. Server
- 2. ClientThread
- 3. SocketMessageType
- 4. SocketMessage
- 5. SignatureCreationRequest
- 6. Request
- 7. KeysValidationRequest
- 8. FileUploadRequest
- 9. CosignerValidationRequest
- 10. CertificateCreationRequest

Model: JAVA classes

Bean classes

1. UserBean

- 2. DocumentBean
- 3. DigitalSignatureBean
- 4. CertificateBean
- 5. RevokedCertificateBean

Business classes

- 1. UserBiz
- 2. DigitalSignatureBiz
- 3. CertificateBiz
- 4. DocumentBiz
- 5. CertificateManager
- 6. SignatureManager

Classes for JDBC connections

- 1. Command
- 2. ConnectionDB
- 3. Persistence
- 4. CmdCreateCertificate
- 5. CmdCreateRevokedCertificate
- 6. CmdRetrieveCertificate
- 7. CmdRetrieveMaxCertId
- 8. CmdRetrieveRevokedCertificate
- 9. CmdRetrieveUser
- 10. CmdUpdateUserCertStatus
- 11. CmdCreateDigitalSignature
- 12. CmdRetrieveDigitalSignature
- 13. CmdUpdateSignatureParameters
- 14. CmdValidateCoSigner
- 15. CmdCreateDocument

- 16. CmdRemoveDocument
- 17. CmdRetrieveDocument
- 18. CmdRetrieveMaxTrustCode
- 19. CmdCreateUser
- 20. CmdRetrieveMaxUserId
- 21. CmdRetrieveUser
- 22. CmdUpdateUserCertStatus

Classes that define datatypes

- 1. Address
- 2. CertificateId
- 3. EmailAddress
- 4. PhoneNumber
- 5. RevocationId
- 6. Row
- 7. SignatureFile
- 8. TrustCode
- 9. UserId

Exception classes

- 1. DatabaseException
- 2. InvalidInputException

Util classes

- 1. BCRSAPrivateCrtKey
- 2. BCRSAPrivateKey
- 3. BCRSAPublicKey
- 4. BigIntegerMath
- 5. DigSigMobServerUtils
- 6. EmailProvider
- 7. HttpConnection
- 8. KeyStoreProvider

9. SMSProvider

Util Interface

Messages

Database (mySQL) Tables

- 1. tbl_UserDetails
- 2. tbl_DocumentDetails
- 3. tbl_DigitalSignatureDetails
- 4. tbl_CertificateDetails
- $5. \quad tbl_Revoked Certificate Details$