# Functional Requirements

* Client must be able to register their interest *online* and provide the following details when registering:
  + Name
  + Mailing address
  + Email
  + Age
  + Gender
  + Phone number
* Client must be shown terms and conditions and must be able to agree or disagree after registering
* Client must complete a *secure* online questionnaire to check whether the sample to be stored is at risk from various infectious diseases after agreeing to terms and conditions
* *Client must be assigned a unique account number when successfully registering*
* Client must be able to pay via credit card for testing and storage fees and opt-in for direct debit of four equal installments when test is successful
* The system must record the following details when a sample is collected from the client
  + Name
  + Address
  + Requested pickup time/date
  + Courier firm authorised to transport sample
* Each sample collected must be assigned a unique identifier and will store the following data records associated with the sample’s unique identifier in a searchable database:
  + Test status
    - Initial sample
    - Waiting to be tested
    - Test pass
    - Test fail
  + Physical status
    - In transit to CCC
    - In storage at CCC
    - In transit to client
    - Delivered to client
    - Destroyed
  + Identification and location
    - Date of storage
    - Facility ID number (3 char)
    - CSC number
    - CSC position
  + Medical information
    - Test log
  + Account information
    - Linked client account number
    - Client details
* The system must record the following details to the sample’s unique identifier when the sample arrives at one of CCC’s facilities and transferred to a CSC:
  + Date of storage
  + Facility ID number (3 char)
  + Fridge number
  + CSC number
  + CSC position
* Laboratory technicians must be able to log test results to the sample’s unique identifier when testing for infectious diseases
* The system must record the following actions for auditory functions, which can only be accessed by Lab Manager
  + Data record creation
  + Data record modification
  + Data record access
  + Data record deletion
* The system must provide the Lab Manager the ability to create new staff users for staff that exist on CCC Human resources system

## Potential Functional Requirements

* The system must generate and send invoices to customer *x* days before due date
* The system must warn customer if invoice is *x* days overdue and destruction of sample is imminent
* The system must advise customer when sample is destroyed

# Non Functional Requirements

* System must comply with Australian Privacy Principles
* The sample must be shipped in a cryo-shipping container marked by unique barcode while being delivered
* Medical information about client must be stored securely
* Sample destruction process must adhere to Australian Standard for disposal of biological samples
* Mobile development must use [Corona SDK](http://coronalabs.com/products/corona-sdk/)
* Credit card payments are only accepted via MasterCard or Visa
* Security requirements
  + Client account managers can only access
    - Client details
  + Lab technicians can only access
    - Sample data
    - Sample location data

# Assumptions

* Refund is via credit card reversal
* Customer registration only occurs online
* CCC Human Resources system already exists and assigns unique identifiers for each staff member

# Questions

* Are invoices to be printed or sent electronically?
  + If printed, who prints? CCC or external printhouse?
* What are the business rules for invoices?
  + How long does a customer get to pay bill?
  + When should the invoices be sent?
  + How long overdue before sample/s destroyed? Is there grace period?
  + Do customers get warning before that happens?

# Remarks

* Need to find a way to determine if sample is initial, or second for testing

# Prototype object

* Client account number
  + Details
    - Name
    - Mailing address
    - Email
    - Age
    - Gender
    - Phone number
  + Payment
    - Credit card
    - Invoices
    - Installment plan
* Sample ID
  + Test status
    - Initial sample
    - Waiting to be tested
    - Test pass
    - Test fail
  + Physical status
    - In transit to CCC
    - In storage at CCC
    - Delivered to client
    - Destroyed
  + Identification and location
    - Date of storage
    - Facility ID number (3 char)
    - CSC number
    - CSC position
  + Medical information
    - Test log