

CTS Testing Services Inc

1. Intro
   1. What to say in intro

Welcome to the Early Access Alpha release of the CTS Testing Services Covid Test Tracking Application. Our first iteration of this product is geared towards Colleges and Universities and will ship with all the functionality required for these institutions to implement weekly testing policies for student and staff. The CTS Testing Services Covid Test Tracking Application allows colleges and universities to implement weekly testing policies without being inundated with the logistics of processing and storing test results as well as the struggles of maintaining data privacy and industry standards regarding storing personal medical information. We ensure our systems meet the requirements set by modern healthcare privacy laws regarding the maintaining of user accounts and storage of private medical data so your organization can externalize their data privacy risks and focus on education.

The software is presented in the form of a cloud-based service which is accessible from any browser whether it be on a windows, mac, iphone, or android device. The CTS Testing Services Company maintains the web server and database and provides a web gateway to be used by the school’s staff and students. The software is built around “roles” such that each user that is entered into the system will be assigned a role which determines what sort of access they have to the system. Each user role has the bare minimum access to the system that is required for their function and the roles of the users are segmented in such a way to ensure that each test follows a certain process. Tests are signed by two separate medical professionals to ensure accuracy, the results are only accessible to the medical staff and users after they’ve verified their identity, and communications regarding results are sent to specific verified parties to be determined by the customer that purchases the product (for example sending positive results to the registration department to place holds on student accounts)

1. Go over all core features and the function of every user
   1. The “non” user (no active session, logged into any account)
      1. Login
      2. Reset password
   2. Vendor
      1. Register new Patient (counter service)
         1. Newly entered users are created with patient level permission
      2. Register new test
      3. View a user
         1. Resend user’s verification email
      4. View Personal Test Results
         1. View Personal Info (personal profile)
      5. Log out
   3. Lab
      1. Edit test samples
         1. Can only edit results, cannot sign tests
      2. View Personal Test Results
         1. View Personal Info (personal profile)
   4. Doctor
      1. Edit test samples
         1. Can edit results and sign tests
         2. When results are signed, email automatically sent (if user verified email)
   5. Patient
      1. View Personal Test Results
      2. View Personal Info (personal profile)
   6. Admin
      1. Register new User
         1. Admin can edit the user’s permission level
      2. Edit user
      3. Submit a new test
      4. Edit a test
         1. Can only change results, cannot sign as a doctor
      5. View Personal Test Results
         1. View Personal Info (personal profile)
2. Complete simulation of the testing process and each user’s interaction
   1. Student walks into campus library where a fellow peer is acting as the “vendor”
   2. Vendor uses iPad to enter the student’s information to create their account.
      1. Vendor walks through the form and enter information as the patient gives it to them over the counter
      2. The vendor tells the patient that their username will be their email address and that whatever email they enter will be the email that they receive their results notifications on.
      3. Vendor tells patient that they must ensure they verify their email before they will receive any emails with their results
      4. A verification email is sent to the user’s email address
      5. User is given a pre-generated password that the vendor creates, vendor tells user how they can log on and change their password to something personalized
   3. Vendor uses iPad to enter the student’s test sample and then walks student through the saliva collection process
      1. Vendor grabs a test vial from their inventory and takes down the serial number in the form as well as the new patient’s username
      2. Vendor explains saliva collection process to patient and then hands over vial
      3. Student performs test and puts vial in the collection tray
      4. The test sample collection tray is picked up by a transportation company and brought to the lab facility
   4. Lab user gets the tray of samples and tests each one and manually inputs the results of the tests into the CTS testing services software
      1. Lab user logs in to his dashboard and searches tests for that day’s date
      2. Lab user performs test of sample and enters result into CTS software
   5. Lab user reports results to an onsite physician for signing
      1. Doctor logs into his dashboard and searches tests for that day’s date (same view as lab user)
      2. Doctor user confirms results of test sample and Signs test
      3. Once test is signed, an email with the results is sent to the patient’s email address automatically (assuming that the patient verified their email)
3. We can conclude with some examples of niche use cases
   1. User calls the testing site and reports they forgot their username or cannot access their account
      1. Employee can search the account via email and report the logon information to the user
      2. Patient can recover/reset their password by entering their username and social security number into the password recovery menu
   2. User calls the testing site and would like to change their email address on file
   3. Employee emails admin user to edit the user account and then resend verification email
4. We can also conclude with some info about upcoming features
   1. Password reset via email verification
   2. Inventory control system for test vials (new db table for vial inventory for better vial tracking and validation)
   3. More front end overhauls
   4. Analytical data and reporting (print report of the results growth/shrinkage over certain time frame)