

# Colposcope Digital System

Medical desktop app redesign | 2015

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## Overview

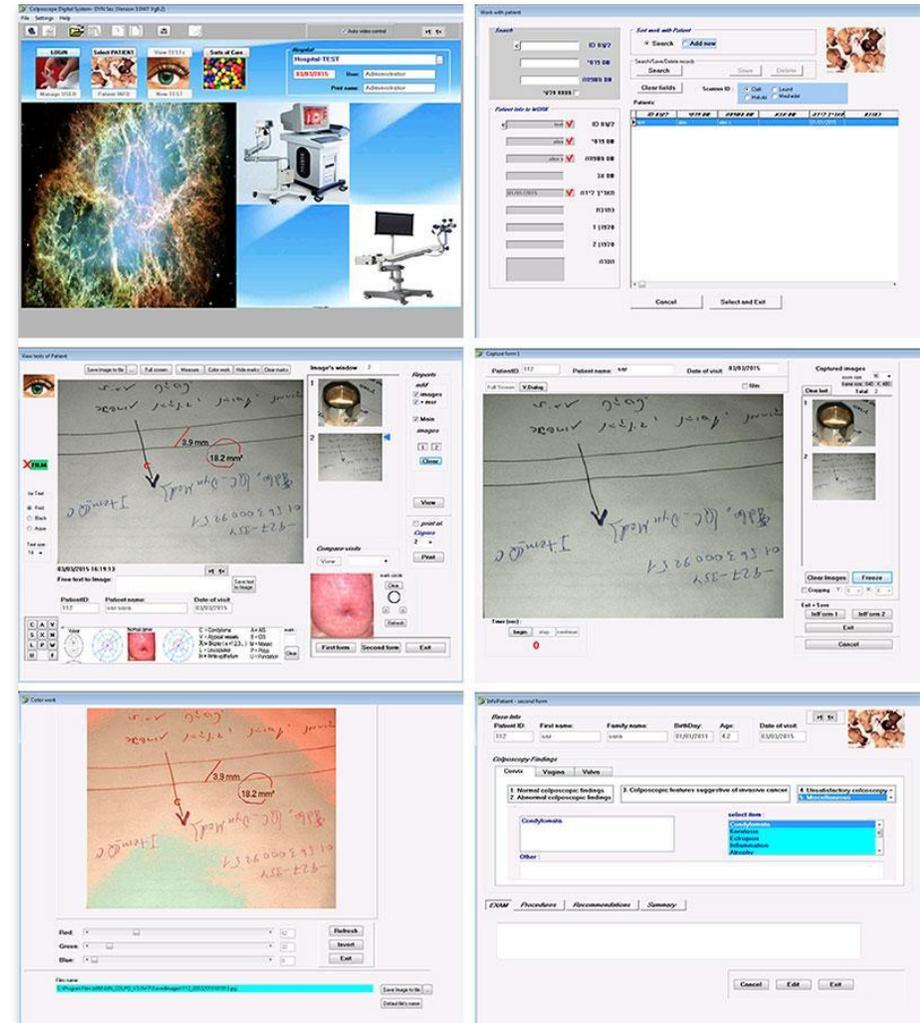
The colposcope is used in hospitals and protection centers for gynecology and forensic examinations. Digital camera is attached the colposcope to capture images and videos. Desktop app is used to support two types of examinations, manage patient files, edit and store captured media, generate reports.



# Goals & Challenges

The original app was made a decade ago. It was difficult to operate, had many usability problems, did not support all needed functionality and looked outdated and unaesthetic. We were asked to do a total redesign of the desktop app.

- Fixing usability problems
- Adding new functionality
- Providing better support to established practices and workflow
- Adding Hebrew support
- Smooth adoption of the new app by the medical personnel

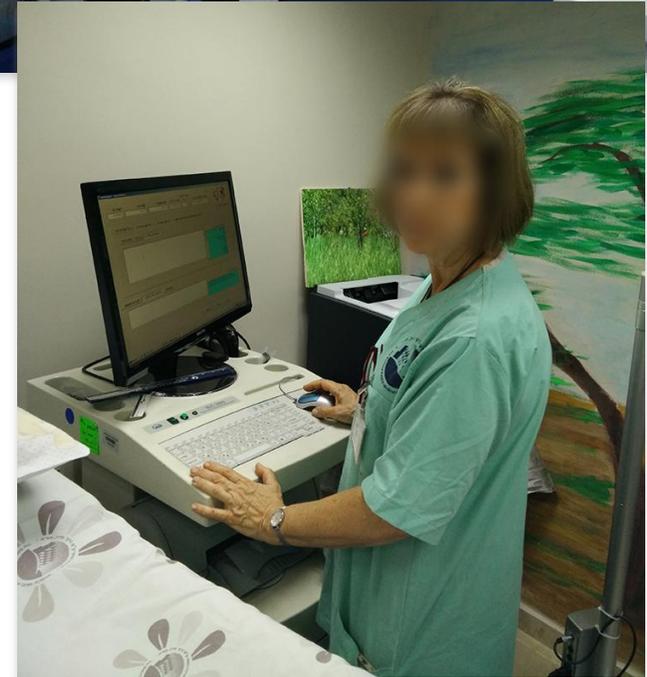


# Research & Discovery

## Field Studies

Our team has visited several medical centers, got familiar with established medical practices and the equipment in examination rooms, which was demonstrated to us by the medical personnel.

We also interview several physicians to understand their workflow, constraints and pain-points.



## Findings

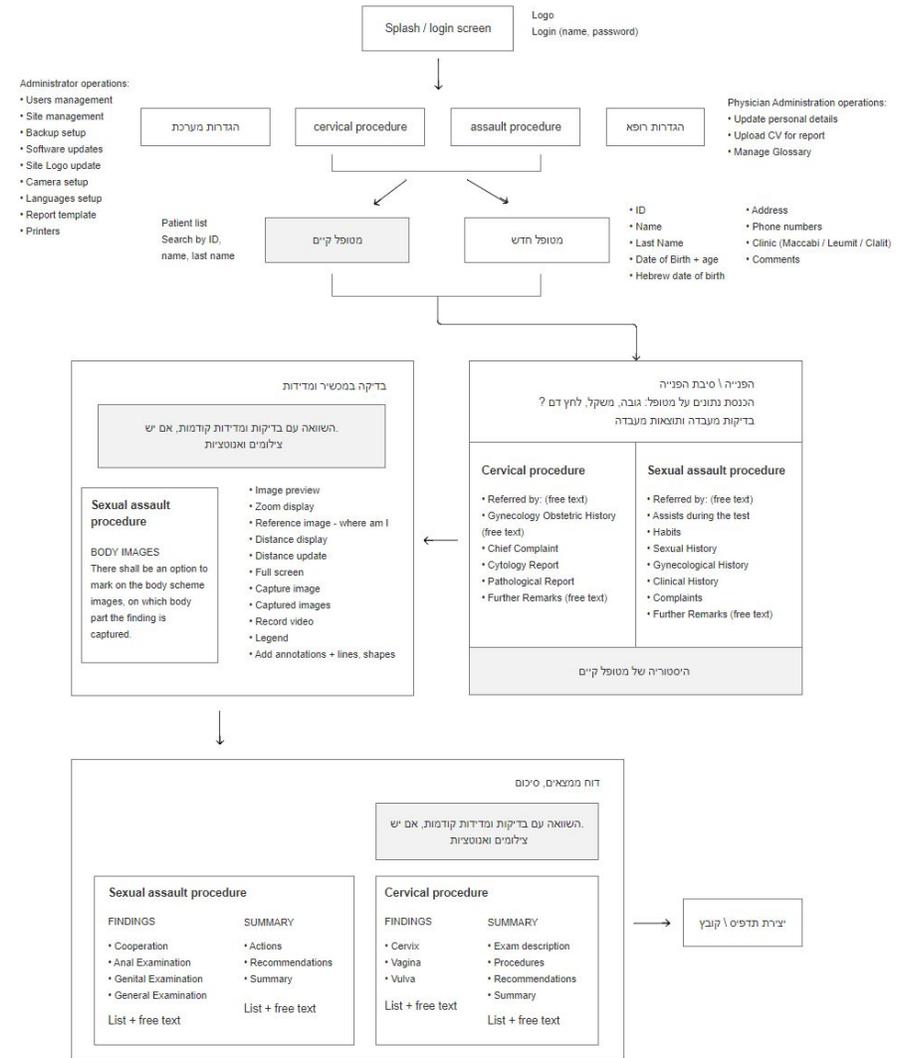
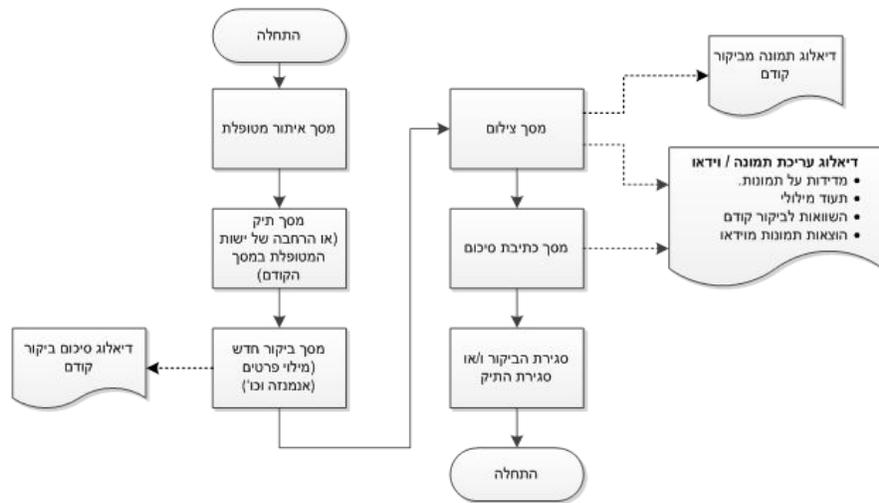
- Some parts of the app weren't used at all
- Structure and order of information were not fully aligned with medical practices and documentation rules
- Some physicians were only using the colposcope system for snapshot capturing while the nurses were operating the app
- Some degree of non alignment of the patient treatment cycle across institutions
- The workflow may differ in medical centers and protection centers
- The equipment setup may differ in various examination rooms

## Things To Consider

- Sensitivity of the whole situation due to the nature of the examinations
- Reports generated in the app were used by legal medicine representatives
- Privacy and security – very sensitive data is being operated
- Legal considerations, such as limitation of data editing after the procedure

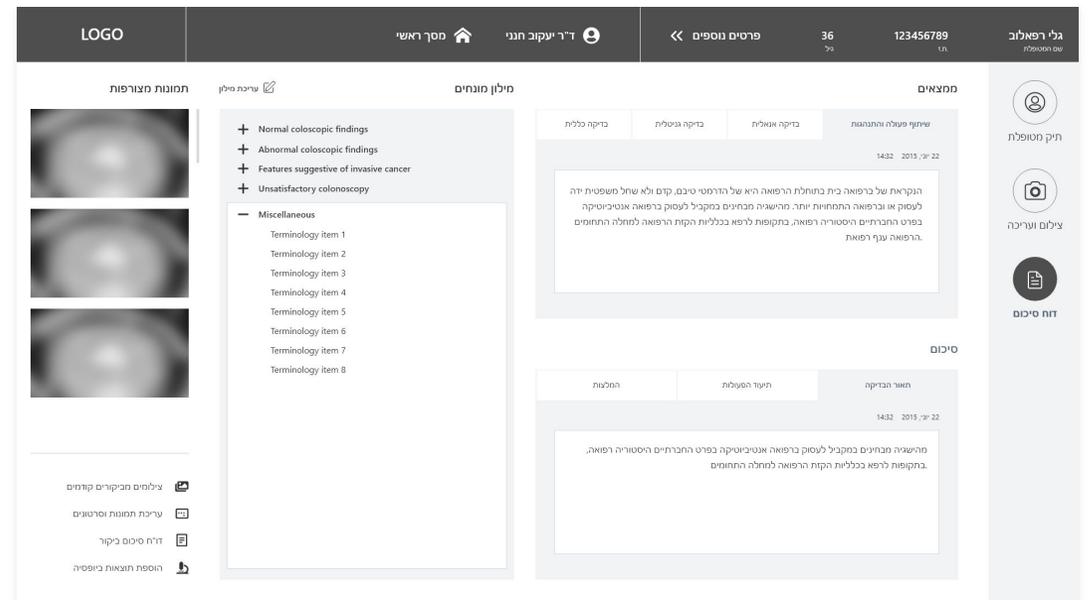
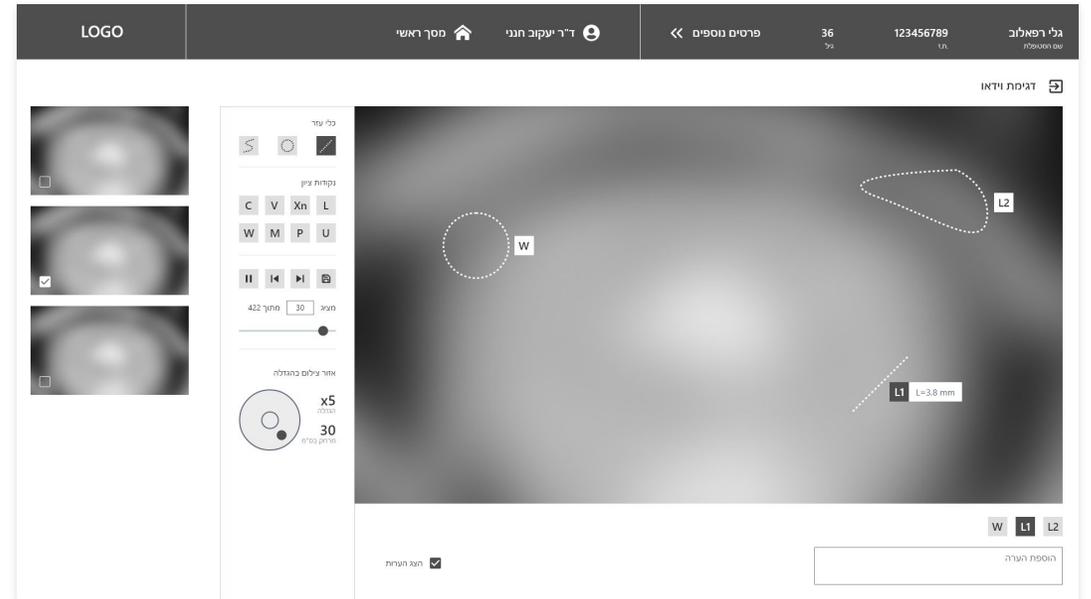
# Requirements & Flows

During the discovery stage the design requirements were gathered together with the dev team (they prepared the SRS document) and then the optimal workflow was crafted for every module of the app.



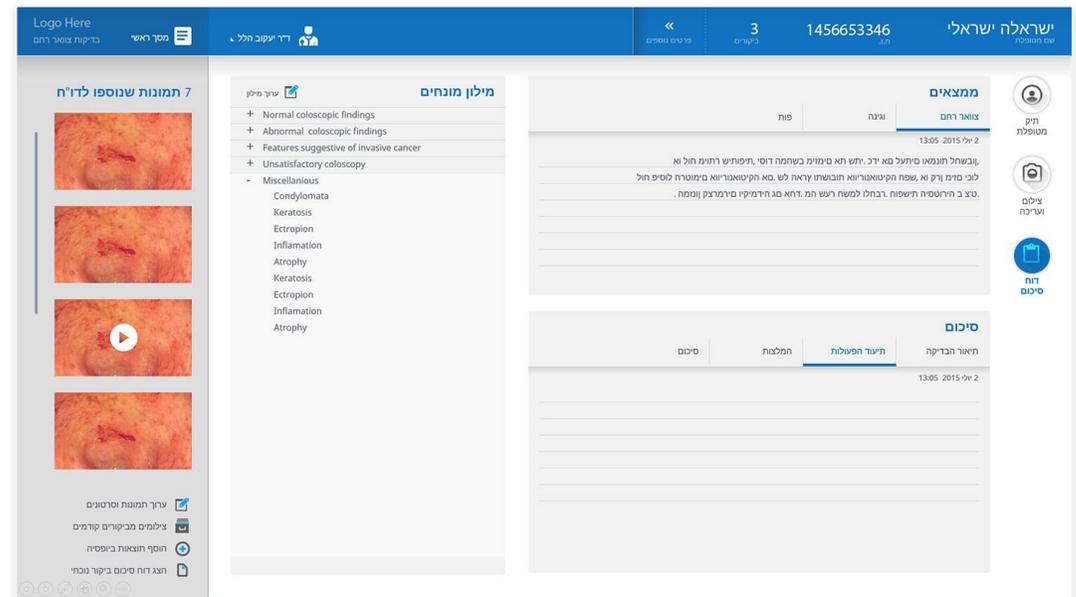
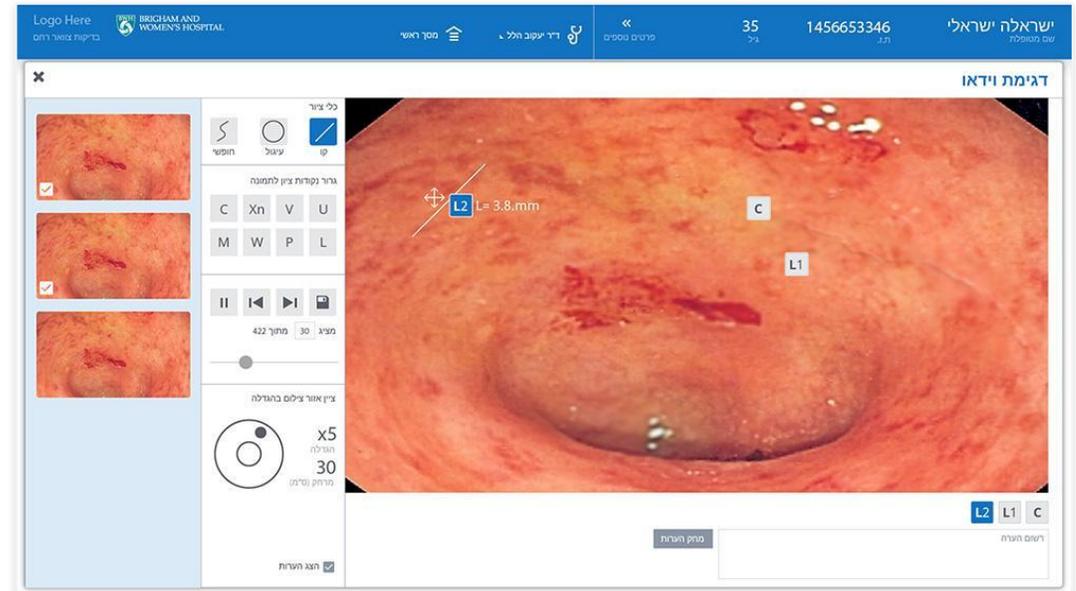
# Wireframing & Prototyping

This is a small part of the whole interface design and interactions with the system which was designed in Axure. Several iterations were made until the optimal result was achieved.



# Visual Design

Several concepts were crafted by the visual designer, upon which the final one was chosen.



# Takeaways

- Appropriate research techniques should be chosen and applied for every project. Field research was crucial in this case and helped to uncover invaluable insights, that otherwise would have been missed.
- We had to operate in some degree of uncertainty due to some legal issues yet to be settled, which meant that changes could be applied in any stage of the project.
- Differences in treatment cycles and workflow across institutions, meant that the system should be adaptive and flexible to support various scenarios.
- Collaboration with the dev team from early stages of the project was essential.

**Thank You!**

Presentation made by Nick Vasiliev | [uxnick.design](https://uxnick.design)