A Solution For Gastroenterology Medical Billing Using iOS





Medical billing entails choosing a code that corresponds to a patient's illness and formatting it in a patient bill. The standard code base, International Classification of Diseases (ICD), will be updated to version 10 on October 1st 2015.



least 3 characters • Numbers 0-9: letters

Figure 1. Key differences between ICD-9 and ICD,taken from cdc.gov With the added complexity of ICD-10, the time and cost to find codes in medical manuals will increase drastically.

The objective of this research was to find a faster and more direct way to create patient bills. To do this, I created an iOS application to search for medical codes and format them in a patient bill.

VIEW

CONTROLLER

Fundamentals

The basic functions of the application rely on core iOS technologies and the model-view-controller (MVC) architecture nattern

Database - SQLite holds all of the bill, patient, and doctor information.

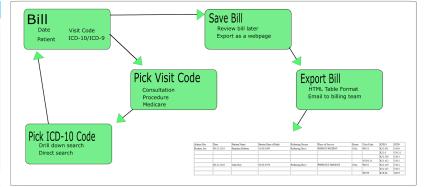
Table View - Lists information like bills and patients. Collection View - Displays information

in a customizable grid layout.

Segues - Transitions between pages that carry data to the next controller.

if sego.identifier = "hepithill" {
let controller = sego.dentationVewController as BillYiewController
controller.administerisgOctor = mil.administerisgDoctor.text

if at patientFirstNew = princtNews[
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controller.nowAsiascr.princtNews[
controller.nowAsiascr.princtNews]



Searching

Searching is done by using a "Textfield Delegate." The text boxes "listen" and query the database when the user taps the textbox or changes the search. The results are displayed in a "popover" where the user can make a selection.



Here, the doctor search is changed. The database is opened and searched with the text in "doctorTextField." In the popover, the user can click on any item in the list to input it into the textbox.

For the direct code search, selecting an option from the search results take the user directly to the detail page. This makes adding a medical code very quick and easy.

Code Prioritization

A medical bill contains a visit code and a diagnoses code.

Diagnoses are linked to the visit code and a bill can have many of each. In that case, they must be prioritized.

I created a drag and drop environment to reorganize the diagnoses codes and visit codes. The prioritization appears in the final bill above.

Acknowledgments

I would like to thank my advisor David Chiu for the time he spent mentoring me and giving me the tools I needed to explore on my own.

I sincerely thank Dr. Rodney Joe for bringing me onto the project and for giving me valuable feedback I needed to make it successful.

This project was funded in part by a grant from GooeySoft Analytics.





CMB 1043