

# CS50 for MBAs

Technology Stacks

# Last Time

Mobile Strategies

- **Full-Stack Development with Node.js**
- Data Visualization with D3

# This Time

Technology Stacks

- frameworks, interfaces, languages

Thank You

- Maria
- Cheng, Christina, Colton
- Alex, Christian, Christine, Daniel, Will
- Dan, Scully, Ian

- website, videos
- keeping in touch



- What are the tech requirements of your idea?
  - Issues of latency, local storage, etc.
- Which platforms to support?
- Consider local versus hosted costs.
  - Consider load on databases, servers.
- Consider costs
  - Database space (GB, TB), bandwidth (Mbps, Gbps), CPU time
- Consider feature set
- Consider savings
  - Security, availability, up-front costs, HVAC, human costs, power, etc.
- Consider security of data

- Python
- Swift
- Ruby on Rails (RoR)
- PHP
- Java
- JavaScript
- C, C++, C#

- Consider how structured your data is.
- Consider performance of database.

# Front End

CSS, HTML, JavaScript, ...

Angular, Ember, Meteor, React, Vue, ...

Bootstrap, Foundation, Semantic UI, ...

# Back End

Go, Java, JavaScript, .NET, PHP, Python, Ruby, Scala, ...  
Django, Flask, Laravel, .NET, Node.js, Rails, ...

# Back End

Linux, Mac OS, Windows, ...

# Back End

Amazon, Google, Microsoft, ...  
Heroku, ...

# Back End

development, testing, staging, production



# Back End

SQL, NoSQL, ...

MariaDB, MySQL, Oracle, PostgreSQL, SQL Server, ...

Bigtable, Cassandra, HBase, MongoDB, Redis, ...

# Mobile

Android, iOS, ...

Java, Objective-C, Swift, ...

Cordova, Ionic, Meteor, React Native, Supersonic, Xamarin, ...

- code reviews
- continuous integration (CI)
- continuous deployment (CD)
- version control
- ...

- BitBucket
- GitHub
- GitLab
- ...

- Circle CI
- Codeship
- Travis CI
- ...



ACT.md

# Patrick Schmid


patrick@act.md

Home < Dashboard | ACT.md

prschmid@act.md

Securehttps://demo.act.md

☆ ⓘ 🔒 🌐 ⋮


 Home Tasks Calendar Plans

Search...

🗨️ 🔔 👤

Signed in successfully.

YOUR PATIENT PLANS


 **David Aaronson**  
Male Born 20 Jan 2000

📅 Plan

✓ Tasks7

📅 Calendar3

💬 Messages0


 **Brady Benoit**  
Male Born 13 Aug 2004

📅 Plan

✓ Tasks12

📅 Calendar0

💬 Messages0

 **Drew Daniels**  
Male Born 12 Jan 1950

📅 Plan

✓ Tasks9

📅 Calendar3

💬 Messages0

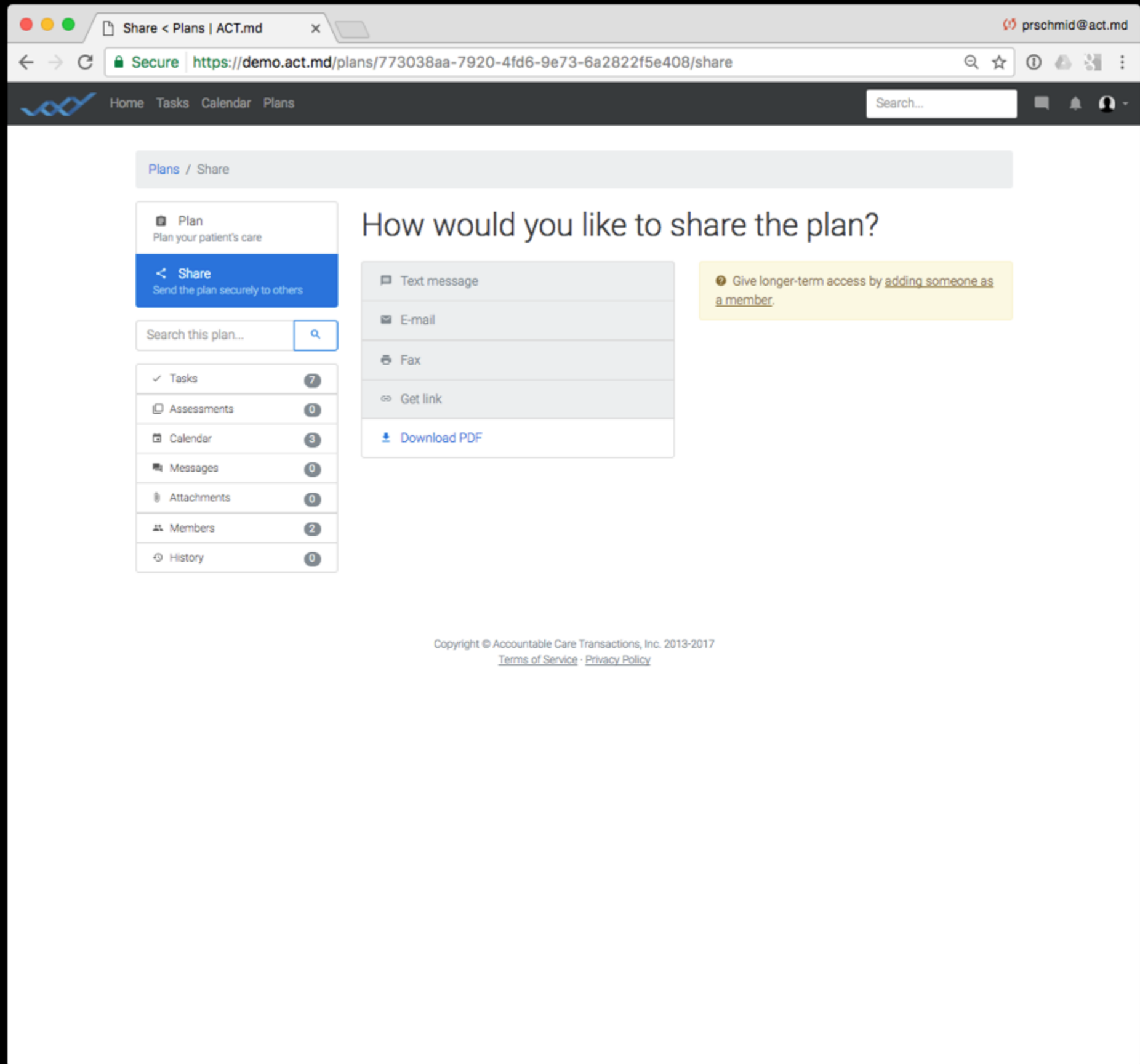
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https://demo.act.md/plans/773038aa-7920-4fd6-9e73-6a2822f5e408







Tasks | ACT.md

prschmid@act.md

Securehttps://demo.act.md/plans/773038aa-7920-4fd6-9e73-6a2822f5e408/tasks

HomeTasksCalendarPlans

Search...

Plans / David Aaronson / Tasks

Plan

Plan your patient's care

Share

Send the plan securely to others

Search this plan...

Tasks7

Assessments0

Calendar3

Messages0

Attachments0

Members2

History0

✓

▼

Goal #1: Attend school 5 days a week

☆ Schedule family meetings for this month and next month

Jessica Settler

11 Apr

✓

▼

Sensitive: Sexual Health

☆ Referral for sexual health counseling

Assertive Com...

11 Apr

✓

▼

Blood Sugar Instability / Impaired Glucose Tolerance

☆ Remove all sugared soda and juice boxes at home, replace with seltzer and water

Alice Aaronson

12 Apr

✓

▼

Blood Sugar Instability / Impaired Glucose Tolerance

☆ Deep breathing exercises and reflection

David Aaronson

13 Apr

✓

▼

Blood Sugar Instability / Impaired Glucose Tolerance

☆ Weekly weight log and reflection

David Aaronson

13 Apr

✓

▼

Goal #2: Participate in an extra-curricular activity

☆ Explore school offerings and David's interest in different after school programs

Jessica Settler

18 Apr

✓

▼

Blood Sugar Instability / Impaired Glucose Tolerance

☆ YMCA running group enrollment (coupon attached)

Robert Aarons...

18 Apr

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Search...

Tasks by due date

Incomplete tasks assigned to you

Completed tasks

Tasks assigned to you that are completed

Starred tasks

Tasks that you have starred

Unscheduled tasks

Tasks assigned to you without a due date

Group tasks

Incomplete tasks assigned to groups you belong to

<input checked="" type="checkbox"/>	<div>David Aaronson</div> <div>Goal #1: Attend school 5 days a week</div>	☆ Schedule family meetings for this month and next month	<div>Jessica Settler</div> <div>11 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Assess Living Situation</div>	☆ Educate the Benois about Brady's respiratory care	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Improve quality of life</div>	☆ Acquire portable oxygen container	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Decrease Brady's Pain</div>	☆ Identify other options to reduce his pain	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Decrease Brady's Pain</div>	☆ Encourage small doses of pain medication in the meantime to ensure that Brady is as comfortable as possible	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Other Help Needed</div>	☆ Investigate home nursing options	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Other Help Needed</div>	☆ Investigate school/therapy staff options	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Other Help Needed</div>	☆ Identify an inpatient collaboration with medical and surgical specialists	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Other Help Needed</div>	☆ Investigate palliative care services	<div>Jessica Settler</div> <div>14 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Assess Living Situation</div>	☆ Demonstrate how to use the home ventilator functions	<div>Jessica Settler</div> <div>16 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Improve quality of life</div>	☆ Teach Brady and family how to use portable oxygen container	<div>Jessica Settler</div> <div>16 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Assess Living Situation</div>	☆ Demonstrate what to do in the case of respiratory difficulty	<div>Jessica Settler</div> <div>18 Apr</div>
<input checked="" type="checkbox"/>	<div>David Aaronson</div> <div>Goal #2: Participate in an extra-curricular activity</div>	☆ Explore school offerings and David's interest in different after school programs	<div>Jessica Settler</div> <div>18 Apr</div>
<input checked="" type="checkbox"/>	<div>Brady Benoit</div> <div>Goal: Improve quality of life</div>	☆ Identify activities that Brady and his family can enjoy with it	<div>Jessica Settler</div> <div>yesterday</div>

- development environment
- language
- web host
- back-end framework
- database
- front-end framework
- monitoring
- caching
- queuing
- scaling
- testing
- security
- ...

# Questions

- ...

# CS50 for MBAs

Technology Stacks

*The End*

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