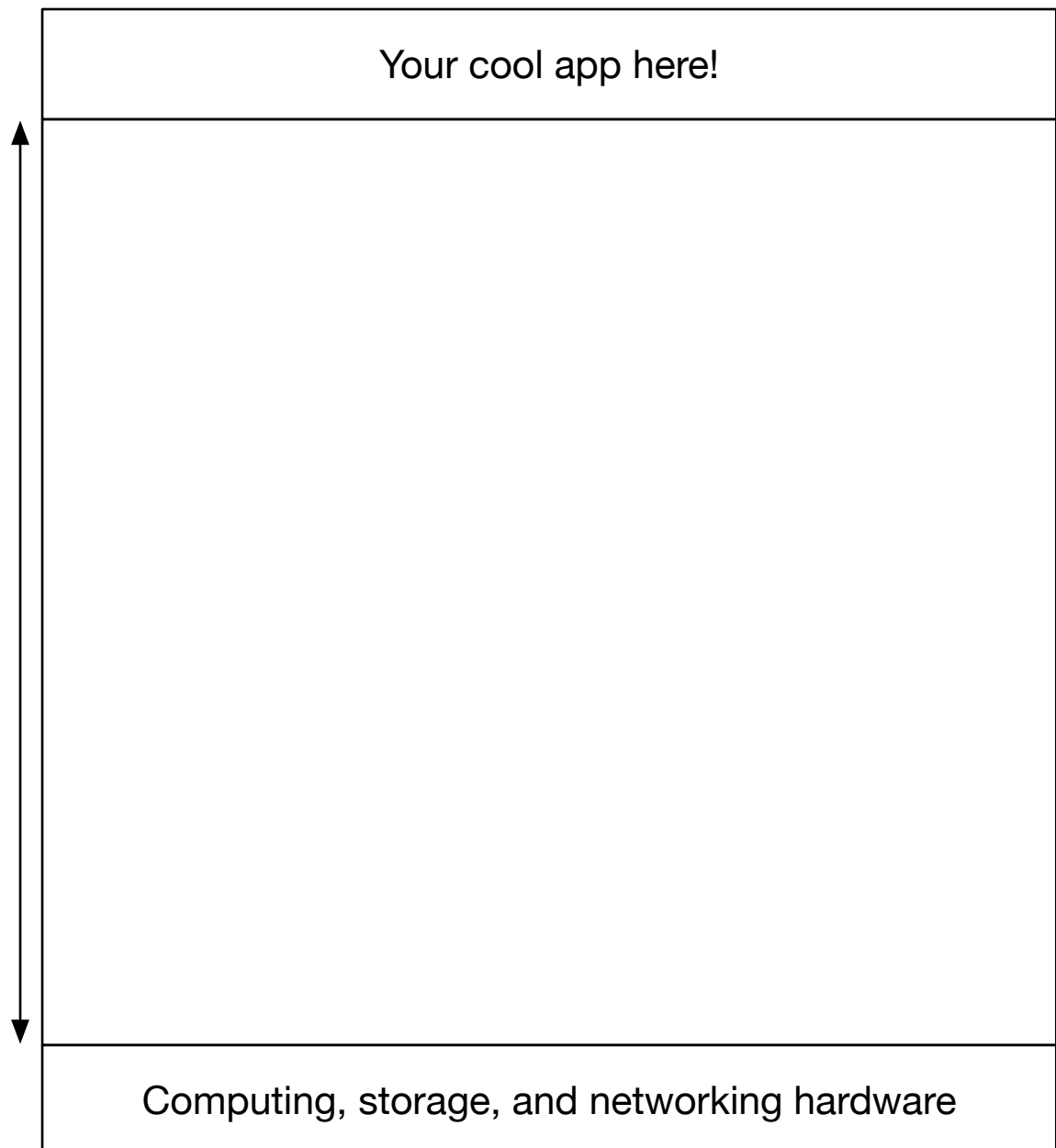# CSE 40613/60613 Web Application Development
Quiz 1 - Sept 28, 2017

Name _____   NetID _____

In the middle box below, define and describe the high level technology stack that enables typical web applications development.

Your cool app here!
Computing, storage, and networking hardware

CSE 40613/60613 Web Application Development
Quiz 2 - Sept 4, 2017

Name _____   NetID _____

Engineering involves the design and development of solutions for unsolved problems. Often those solutions are developed using existing technologies applied in new way, often by combining multiple technologies into a hybrid solution for the given problem. Sir Tim Berners-Lee did exactly that when he designed the WWW. In the box below, on the left name an existing technology that he adapted and its new name or role on the right.

Existing technology that was adapted	New name or role in the WWW

CSE 40613/60613 Web Application Development
Quiz 3 - Sept 13, 2017

Name _____   NetID _____

Answer any 5 of the following questions. Put an "X" through the question you do not want graded.

D3 was designed using existing standards. What would an advantage of this be?

Name two advantages of using closures in your code.

Explain with one sentence what the following code is doing.
```
d3.select("#bar").append("svg").attr("width", 960).attr("height",500);
```

Name one distinct feature of WebSockets.

For the rect created by the following code, add code to make its width as 100, height as 50.
```
rect = svg.selectAll(".bar") .data(data) .enter() .append("rect") .attr("class", "bar") .attr("x", 0) .attr("y", 0);
```

Name two types of applications WebSockets can benefit from and how.

CSE 40613/60613 Web Application Development
Quiz 4 - Sept 20, 2017

Name _____   NetID _____

Answer 4 of the following 5 questions. Put an "X" in the question you do not want graded.

The Equifax breach that exposed sensitive data for as many as 143 million US consumers was accomplished by exploiting a Web application vulnerability that had been patched more than two months earlier. Where in the Equifax web infrastructure was that unpatched vulnerability?

Name 2 advantages of using a Virtual Machine.

Why should you NOT use FTP? What is the alternative?

Name 3 ways a HTTP client and server exchange information. These are part of the protocol and are often called " HTTP request methods" or "HTTP verbs".

Google Analytics can be used to track users and the performance of web applications. Give three examples of statistics or metrics that it can collect, generate and report.

CSE 40613/60613 Web Application Development
Quiz 5 - Oct 2, 2017

Name _____   NetID _____

Answer all of the following 5 questions.

Explain CGI.

Give two advantages of MVC.

Define two of the three parts of MVC.

Describe the what happens during the SSL handshake.

What happens when a web server receives a post request?

CSE 40613/60613 Web Application Development
Quiz 6 - Oct 9, 2017

Name _____   NetID _____

Answer any 5 of the following 6 questions. Put an "X" through the question you don't want graded.

What is 'psql?

Describe 'column' databases; compare with relational databases

Name two frequently used SQL commands?

Give 2 advantages of RDBMS over NoSQL.

Describe one of the properties of an ACID (Atomic - Consistency - Isolation - Durability) compliant database.

Name any 3 of the top-ten RDBMS products (commercial or open source). A list was identified in the class notes and lecture.

CSE 40613/60613 Web Application Development
Quiz 7 - Nov 6, 2017

Name _____   NetID _____

Answer any 5 of the following 6 questions. Put an "X" through the question you don't want graded.

Who was Grace Hopper?

Define CRUD and the request types that correspond to it.

Describe MVC (or MVT) and what it is for.
MVC - Model View Controller
MVT - Model View Template

What is the main idea behind Class Based Views (CBV)?

What kind of a database is MongoDB?

In a framework, what is a model?

CSE 40613/60613 Web Application Development
Quiz 8 - Nov 8, 2017

Name _____   NetID _____

Answer any 4 of the following 5 questions. Put an "X" through the question you don't want graded.

What's an important idea derived from the book " Mythical Man-Month"?

What's a Gantt chart and how is it used in Software Engineering?

Application Lifecycle Management as discussed in class includes eight sub-activities. Identify and define at least 3 of them.

What do we mean by "feature creep"? How can it be addressed?

We discussed several models, frameworks, and methodologies for conducting software engineering. Name and describe at least 2 of them.

CSE 40613/60613 Web Application Development
Quiz 9 - Nov 15, 2017

Name _____   NetID _____

Answer any 4 of the following 5 questions. Put an "X" through the question you don't want graded.

What are some important design considerations that you learned from the presentation by Ameer Armaly, our guest speaker in last class?

What does UX stand for? What is the goal of UX in terms of web design?

Several web security news items have been discussed in class recently, e.g., a growing IoT botnet, ransomware, Equifax, Krack, etc. Pick one of these and discuss the threat and measures to defend against the threat.

What is mean by DevOps?

What is the Trolley problem? How does it apply to web development?

CSE 40613/60613 Web Application Development
Quiz 10 - Nov 27, 2017

Name _____   NetID _____

Answer 1 of the following 2 questions. Put an "X" through the question you don't want graded.

What are some design considerations, career advice, new technologies or web development start-up insights that you learned from the presentation by Tori Huang, our guest speaker in last class? OK to identify anything you found interesting and informative.

Gantt charts are a tool used for software project management. List (number them) and describe at least 5 ways they can help with software project management.