User Interface Development with React.js

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Advisor: Laurie Anderson, PhD.





Organization and Opportunity

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Digital Skills for All

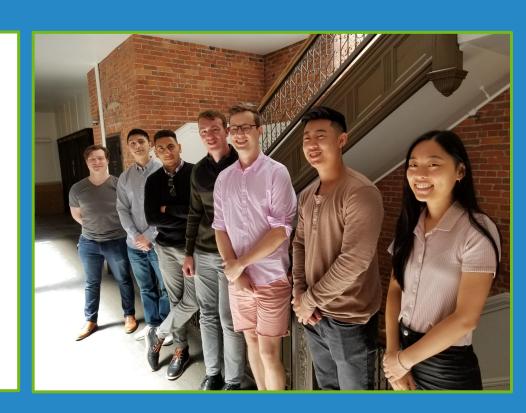
"Our mission is to break down cultural and systemic social barriers that prevent youth and young adults of all ethnicities, genders, and abilities from exploring computer science as a potential career and field of study. We work to create career pathways for youth to engage with and thrive in the field of technology."

DigitalSkillsforAll.org



The Team

- UX/UI
- Front-end
- Back-end
- Data Science



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The Project

- Connect aspiring entry-level technology professionals to job opportunities
- Give users tools to research and explore career paths
- Provide only entry-level & internship opportunities
- Use Indeed.com to source job listings
- Design the platform top be accessible and simple to use

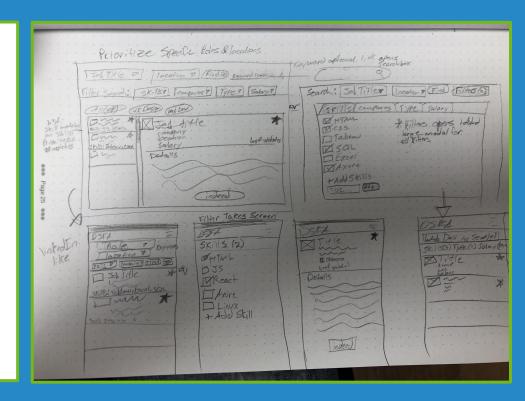
Design & Development



UX/UI Design

Sketching

- Low Fidelity
- Rapid Development
- Feature Ideas
- General Placement

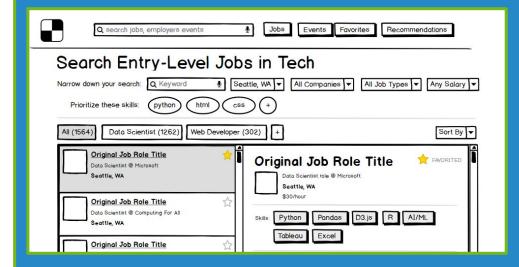




UX/UI Design

Wireframing

- Low Fidelity
- Feature consolidation
- Informational Hierarchy
- User Experience

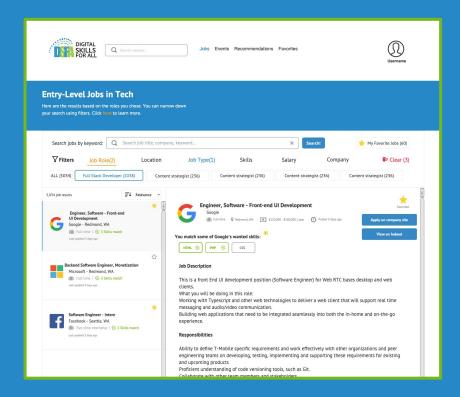




UX/UI Design

Mock-ups

- High Fidelity
- Color & shapes
- Final placement
- Ready for Development

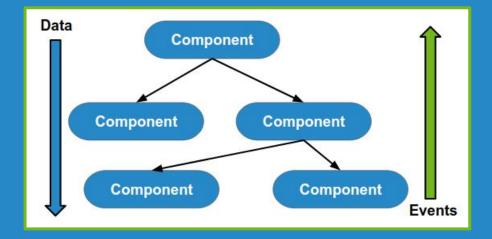


Technical Development



React.js

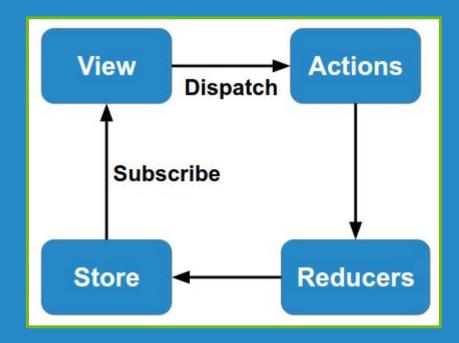
- Component based UI
- App "state"
- Events & Data
- Development Challenges





Redux

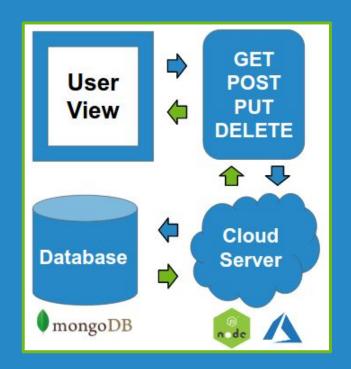
- Helps React.js manage app state
- Easy flow of data to components
- Setup Challenges





RESTful API

- HTTP request/response cycle
- Standardized methods
- Collaboration with the back-end team



Personal & Professional Growth



Strengths Found

- Communication
- Learning new technologies
- Researching solutions
- Organization

- Friendly and easy to work with
- Giving valuable project input
- Asking for help when needed

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New Professional Trajectory

- Combine my broad interest and skill set
- Work at a higher level of technical development
- Manage product and projects
- Continue learning about new technologies and approaches

Conclusion



UI Development with React.js

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Project Summary

- Create a job portal website for entry-level tech professionals
- Collaborate with fellow interns on front-end, back-end, design, and data science teams
- · Participate in daily stand-up meetings

- · Have ownership over front-end development and design
- · Learn and use industry standard tools for development
- Test for, report, and fix software bugs

- Gain comfortability with ambiguity
- · Develop career skills in web design and development
- · Produce something valuable

Methods

1. Sketch

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2. Wireframe

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3. Mockup

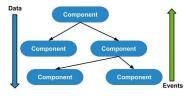


Challenges

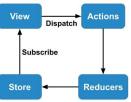
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- Unfamiliarity with new tools and engineering practices
- · Ambiguity in project design
- Inexperience of the development team
- Collaboration with remote teams

4. React.js



5. Redux



6. RESTful API



Results

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- Designed and developed 5 webpages
- Learned to use Axure, React.js, Redux, and Azure DevOps
- · Gained experience in Agile development
- · Further realized my career path

Tools





















Acknowledgements

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