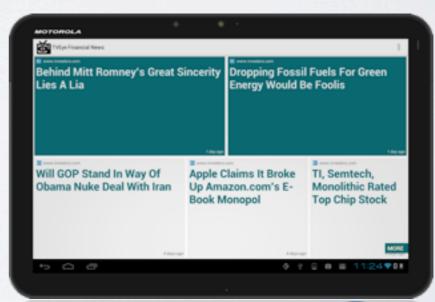
TVEYE FINANCIAL NEWS

Grand Valley State University
School of Computing
CIS467 Senior Capstone Project
Nathan Bowman, Erin Carrier, Cory Hagerman, Greg Zavitz







WHOWEARE



Nathan Bowman



Erin Carrier



Cory Hagerman



Greg Zavitz



THE PROJECT

- Android tablet application to accompany financial TV
- Magazine style news reader
- Assist back-end in learning user interest preferences









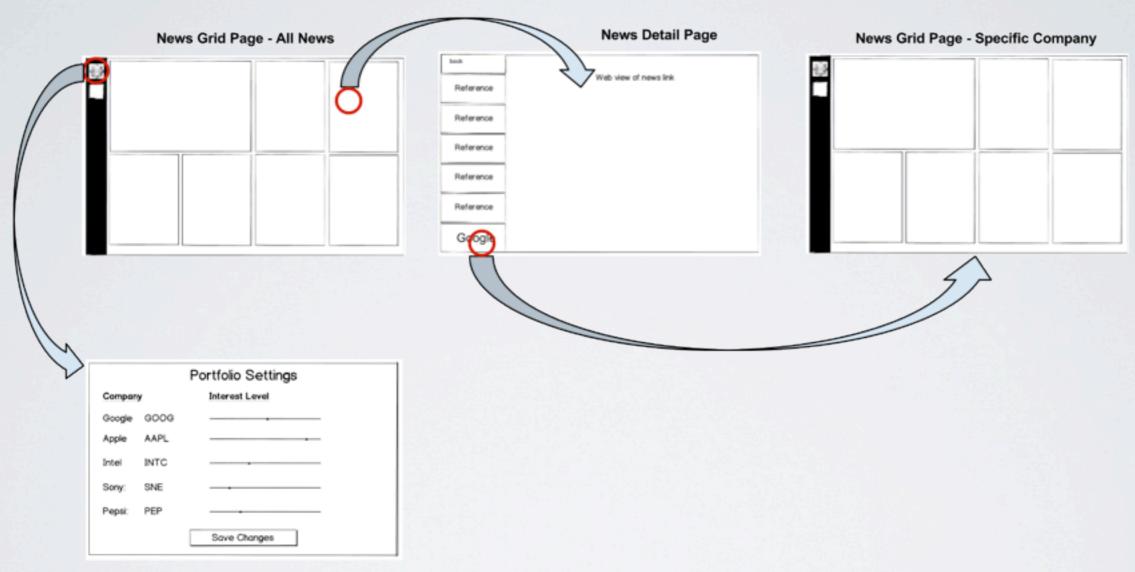
FIRST STEPS WITH ANDROID

- Learning the basic fundamentals of Android
- Initial impressions of Android development
 - Using the available documentation
 - Availability of relevant code samples





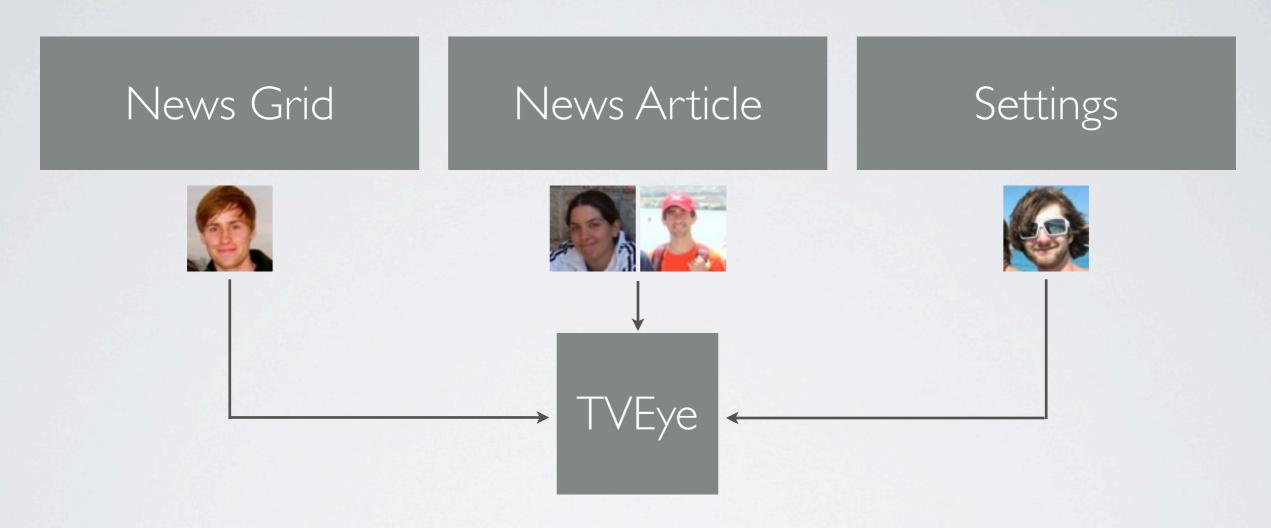
DESIGNINGTHEAPP



- Application layouts and flow using myBalsamiq
- Design critique meetings



ITS ALL ABOUT TEAM WORK



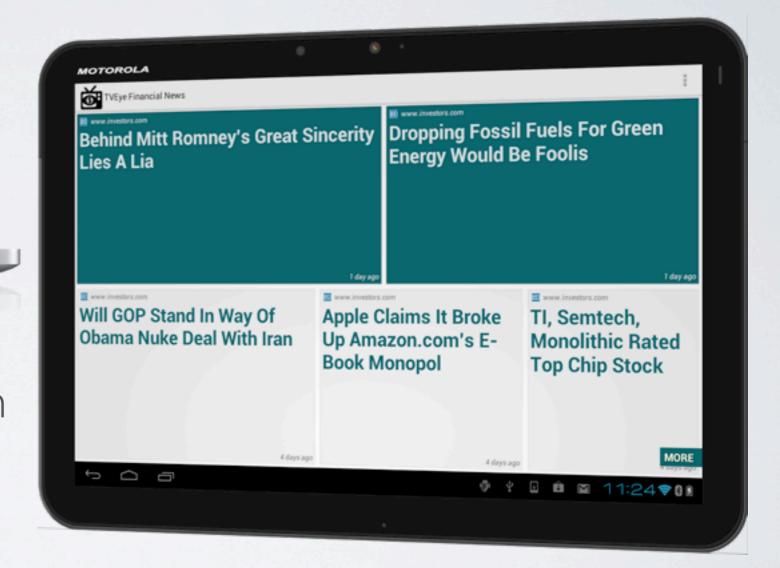
- Activity modularity made it easy to assign tasks
- Distributed source control made conflicts minimal



APPLICATION DRILL-DOWN



Overall tablet application design inspired by the web application version of TVEye





APPLICATION DRILL-DOWN

MOTOROLA High TVEye Financial News interest Behind Mitt Romney's Great Sincerity | Dropping Fossil Fuels For Green Lies A Lia **Energy Would Be Foolis** highlight www.investors.com Will GOP Stand In Way Of **Apple Claims It Broke** TI, Semtech, Obama Nuke Deal With Iran Up Amazon.com's E-**Monolithic Rated Book Monopol Top Chip Stock** Dynamic tile sizing

Additional settings

More articles



APPLICATION DRILL-DOWN

Scrollable article content

MOTOROLA Google Rallies Into Q1 Earnings; 25% Sales Gain See Google Rallies Into Q1 Earnings; 25% Sales Gain See Google KEVIN SHALVEY Android Deutsche Update: Google rose nearly 2% in late afternoon trade to 648.45in advance of Q1 earnings after the close, Ising off a raft of big-tech corporate results in the coming weeks. Wall Street still expects earnings per share up 19% to \$9.65. Revenue likely rose 25% to \$8.15 billion, according to the latest revised consensus forecast. Apple Google missed Q4 EPS forecasts. Facebook Wall Street expects Google's per-share profit for Q1 to rise 19% from the year-earlier quarter when the company reports its latest financials late Thursday, but analysts will be watching its advertising rates. Google's (GOOG) sales minus traffic acquisition costs are seen rising 25% to \$8.14 billion, according to analysts polled by Thompson Reuters. "Ser-share earnings minus items are expected to be \$9.65, up 19.4% from \$8.08 in Q1 2011. But in January, when Google reported an 8% decline in the revenue per click for Q4, analysts worried that

By at least one estimate, the revenue per click rate has again fallen. Google's cost per click - what advertisers

nay for each time a user clicke an ad - fell 5% in O1 reports software maker Adobe Systems (ADRF), which on

Facebook (FB) was muscling in on the advertising market.

Explicit Interest

Individual explicit interest

Font size changing

GRAND VALLEY STATE UNIVERSITY,

Implicit Interest

WRITING CODE

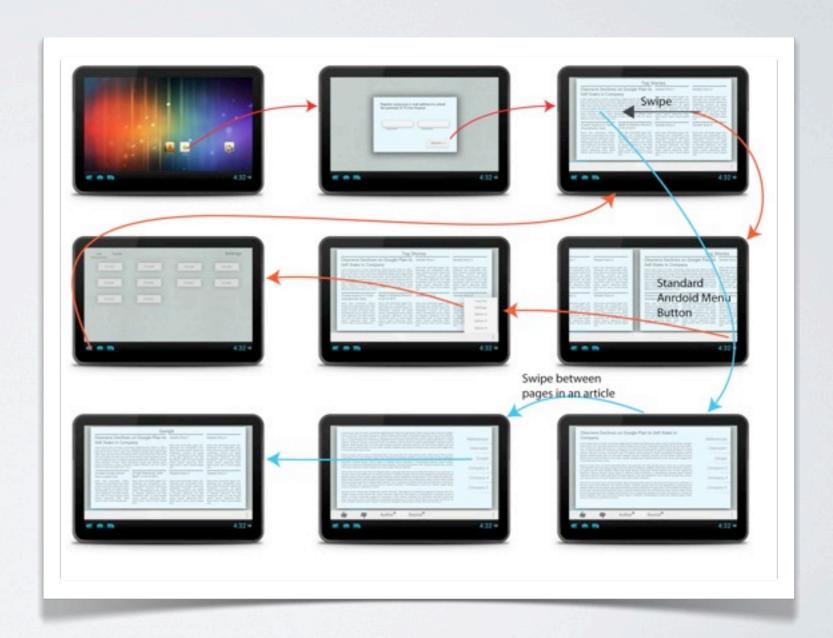
- · Setting up a skeleton application
- Creating placeholder activities
- Providing asynchronous API calls
- Developing with Xoom tablets

```
float rowSum = row.getWeightSum();
float averageWeight = rowSum / stories.size();
float sumWeights = 0;
for(int i = 0; i < stories.size(); i++) {
    JSONObject story = stories.get(i);
    final String metadata = story.toString();
    View tile = inflater.inflate(R.layout.news_tile, null)
    tile.setOnClickListener(new OnClickListener() {
        public void onClick(View v) {
            Intent intent = new Intent(getActivity(),
                    NewsArticleActivity.class);
            intent.putExtra("metadata", metadata);
            getActivity().startActivity(intent);
    1);
    float interest = (float) story.optDouble("interestLeve
    float interestVariance = interest - averageInterest;
    float weight = (1 - interestMultiplier) * averageWeigh
    sumWeights += weight;
    tile.setTag(weight);
    interestViews.add(tile);
    populateTile(tile, story);
    row.addView(tile);
}
```



CHALLENGES

- Constantly changing design
- Working with an evolving API
- Determining the best techniques for learning user preferences





POSSIBLE EXPANSIONS

- Integrating with TV program identification
- More learning techniques, less user interface design





THANKYOU!



