Internet and Web Systems -2 Bibliography

Lokanath Chandra Reddy

Department of Computer Science

University Of Massachusetts Lowell

```
Week 1
    @INPROCEEDINGS{7439656,
    author={W. Peng and Y. Zhou},
    booktitle={2015 International Symposium on Educational Technology (ISET)},
    title={The Design and Research of Responsive Web Supporting Mobile Learning Devices},
    year = \{2015\},\
    pages=\{163-167\},
    keywords={Internet; Web design; mobile learning; smart phones; Internet; Web site; mobile
    learning devices; mobile learning resources; responsive Web design process; responsive Web
    design research; smart phones; tablet devices; user experience; Benchmark testing; Browsers;
    Image resolution; Media; Mobile communication; Mobile handsets; Web design; Mobile learning
    devices; learning resources; responsive; web design},
    doi=\{10.1109/ISET.2015.40\},\
    month={July},
    organization={IEEE}.
    Abstract = { This paper talk about how the mobile devices usage has increased for browsing and
    how it possible to make it feasible to websites to function perfectly on all the mobile devices and
    how can it used for learning puposes
    @inproceedings{lai2015applying,
     title={Applying continuous integration for reducing web applications development risks},
     author={Lai, Sen-Tarng and Leu, Fang-Yie},
     booktitle={Broadband and Wireless Computing, Communication and Applications (BWCCA),
    2015 10th International Conference on \,
     pages=\{386-391\},
     year = \{2015\},\
     organization={IEEE.
     abstract= {This paper talks about what kind development workflow is better and how does it
    affect the development and what needs to be done to reduce the development risks. This paper
    provides deep insight about the Agile development approach, Web Application development and
    methods followed, risks involved and speaks about the advantages and disadvantages of
    Continuous Integration. }
```

```
Week2:
```

```
@INPROCEEDINGS (6859693,
    author={V. Okanovic},
    booktitle={2014 37th International Convention on Information and Communication Technology,
    Electronics and Microelectronics (MIPRO)},
    title={Web application development with component frameworks},
    vear = \{2014\},\
    volume={ },
    number={},
    pages=\{889-892\},
    keywords={Internet;Java;public domain software;dynamic Web application development;open
    source Java Web component frameworks; Data models; HTML; Java; Open source software; Web
    pages;XML},
    doi={10.1109/MIPRO.2014.6859693},
    month = \{May\},\
    abstract= {This paper provides and insight to the open source software available, its use and
    details. Java based frameworks are listed down with mentioning its advantages and disadvantages.
    The frameworks have also been compared to provide a deeper insight.}
4
    @Article{Constantinides2008,
    author="Constantinides, Efthymios
    and Fountain, Stefan J",
    title="Web 2.0: Conceptual foundations and marketing issues",
    journal="Journal of Direct, Data and Digital Marketing Practice",
    year="2008",
    month="Jan",
    day="01",
    volume="9",
    number="3".
    pages="231--244",
    abstract="This paper identifies the technological and commercial foundations of the new category
    of online applications commonly described as Web 2.0 or Social Media. It examines the relevance
    of Web 2.0 for Marketing Strategy and for Direct Marketing in particular. The issue is not a clear-
    cut one: while several observers saw in Web 2.0 a new stage in the evolution of the internet,
    others simply rejected it as a new High-Tech hype while there is still no generally accepted
    definition and demarcation of the term. Paradoxically, even without an accepted definition and
    despite lack of extensive research, the corporate world seems to embrace the Web 2.0 concept:
    high-profile mergers and acquisitions have already taken place or are under way while
    corporations are rushing to integrate various forms of social media into their marketing planning.
    The experience so far, based to a large degree on anecdotal evidence, is that Web 2.0 has a
    substantial effect on consumer behavior and has contributed to an unprecedented customer
    empowerment.
    issn="1746-0174",
    doi="10.1057/palgrave.dddmp.4350098",
    url="https://doi.org/10.1057/palgrave.dddmp.4350098"
    }
```

```
Week 3
```

```
@INPROCEEDINGS \ 5967100.
    author={I. P. Vuksanovic and B. Sudarevic},
    booktitle={2011 Proceedings of the 34th International Convention MIPRO},
    title={Use of web application frameworks in the development of small applications},
    year = \{2011\},\
    volume={ },
    number={},
    pages=\{458-462\},
    keywords={Internet;object-oriented programming;software engineering;Codelgniter Web
    application;PHP;data processing model;design pattern;domain logic;enhanced security;software
    development methodology;user interface;Databases;Encoding;Libraries;Maintenance
    engineering; Programming; Software; Testing \},
    doi={}},
    ISSN={}
    month = \{May\},\
    Abstract= { This paper compares two versions of web application developed using php framework
    and CodeIgniter Web Application Framework Based on results of the comparison, we argue that,
    contrary to the common practice, use of web application frameworks is justified in development
    of small applications. It also provides detailed insights to the different web application
    frameworks }
    @article{Jin:2017:DIW:3069658.3069666,
6
     author = {Jin, Karen H.},
     title = {On Designing of an Intro to Web Development Course for Non-majors with Modern
    Frameworks and Tools},
     journal = {J. Comput. Sci. Coll.},
     issue date = \{June\ 2017\},
     volume = \{32\},
     number = \{6\},
     month = jun,
     year = \{2017\},\
     issn = \{1937-4771\},\
     pages = \{34-36\},
     numpages = \{3\},
     url = {http://dl.acm.org/citation.cfm?id=3069658.3069666},
     acmid = \{3069666\},\
     publisher = {Consortium for Computing Sciences in Colleges},
     address = {USA}.
     abstract = {In this paper, speaks about why and how can we integrate, web development related
    curriculum to non IT students, what is its importance and give a short description for each of the
    points
    }
```

```
Week 4
    @article{monier2015evaluation.
     title={Evaluation of automated web testing tools},
     author={Monier, Mohamed and El-mahdy, Mahmoud Mohamed},
     journal={International Journal of Computer Applications Technology and Research},
     volume={4},
     number=\{5\},
     pages=\{405-408\},
     year = \{2015\}
     abstract={ This paper evaluates different web application testing tools available in the industry.
    The study present each tools with features which in the same and different degree with other tools
    and how each tool behave against others tools' features}
    }
    @InProceedings{10.1007/978-3-319-27030-2 11,
    author="Seipp, Karsten
    and Devlin, Kate",
    editor="Monfort, Val{\'e}rie
    and Krempels, Karl-Heinz",
    title="A Client-Side Approach to Improving One-Handed Web Surfing on a Smartphone",
    booktitle="Web Information Systems and Technologies",
    year="2015",
    publisher="Springer International Publishing",
    address="Cham",
    pages="163--178",
    isbn="978-3-319-27030-2",
    abstract="This paper examines the impact of natural movements on usability and efficiency of
    one-handed website operation on touchscreen smartphones. They present and evaluate a
    JavaScript framework which transforms the controls of all page elements into an interface that
    corresponds to the natural arcing swipe of the thumb. This can be operated via swipe and tap,
    without having to stretch the thumb or change the grip on the phone. The interface can be toggled
    on or off as required and keeps the original presentation of the website intact. Two user studies
    show that this choice of interface and its simplified interaction model can be applied to a diverse
```

range of interactive elements and websites and provides a high degree of usability and efficiency."

}

```
Week 5
      @inproceedings{yu2011enhancing,
      title={Enhancing mobile browsing and reading},
      author={Yu, Chen-Hsiang and Miller, Robert C},
      booktitle={CHI'11 Extended Abstracts on Human Factors in Computing Systems},
      pages={1783--1788},
      year = \{2011\},\
      organization={ACM}
      abstract= { This research talks about the difficulties faced by the mobile web browser users and
     provides insights on how it can be overcome. They propose their own idea by designing a
     browser prototype.
10
     @InProceedings{10.1007/978-3-319-27030-2_10,
     author="Rauf, Irum
     and Siavashi, Faezeh
     and Truscan, Dragos
     and Porres, Ivan",
     editor="Monfort, Val{\'e}rie
     and Krempels, Karl-Heinz",
     title="Scenario-Based Design and Validation of REST Web Service Compositions",
     booktitle="Web Information Systems and Technologies",
     year="2015",
     publisher="Springer International Publishing",
     address="Cham",
     pages="145--160",
     abstract="This research paper talks about an approach to design and validate RESTful composite
     web services based on user scenarios. They have made use of UML diagrams for easier
     understanding. With the scenario based approach, they have showed how to model a service
     based composition with UML and explain in detail on how the RESTful API requests and
     responses are made",
     isbn="978-3-319-27030-2"
     }
```

```
Week 6
      @INPROCEEDINGS{7275851.
      author={S. Kumari and S. K. Rath},
      booktitle={2015 International Conference on Advances in Computing, Communications and
      Informatics (ICACCI)},
      title={Performance comparison of SOAP and REST based Web Services for Enterprise
      Application Integration \},
      vear = \{2015\},\
      volume={ },
      number={},
      pages={1656-1660},
      abstract={This paper talks about the Web Services and also its different types such as Simple
      Object Access Protocol (SOAP) and Representational State Transfer Protocol (REST). It
      discusses the importance of the selecting an appropriate interaction styles i.e., either SOAP or
      REST for building Web Sevices. In this study, the performance of application of web services
      for Enterprise Application Integration (EAI) based on SOAP and REST is compared. Since web
      services operate over network throughput and response time are considered as a metrics
      parameter for evaluation.},
      doi={10.1109/ICACCI.2015.7275851},
      ISSN={},
      month={Aug},}
12
      @INPROCEEDINGS{8114462.
      author={O. Ethelbert and F. F. Moghaddam and P. Wieder and R. Yahyapour},
      booktitle={2017 IEEE 5th International Conference on Future Internet of Things and Cloud
      (FiCloud)},
      title={A JSON Token-Based Authentication and Access Management Schema for Cloud SaaS
      Applications},
      year = \{2017\},\
      volume={ },
      number={},
      pages=\{47-53\},
      abstract={This paper talks about the authentications performed in SaaS(Software as a service)
      based applications and Cloud computing. This paper is focused on the security and privacy
      challenges of cloud computing with specific reference to user authentication and access
      management for cloud SaaS applications, and speaks in detail about the of JWT for client
      authentication and session management. An analysis of the proposed model portrays a system
      that is secure, lightweight and highly scalable for improved cloud resource security and
      management.}.
      doi={10.1109/FiCloud.2017.29},
      ISSN={}
      month={Aug},}
```

```
Week 7
     @INPROCEEDINGS{7124684,
     author={C. Pavlovski and C. Warwar and B. Paskin and G. Chan},
     booktitle={2015 22nd International Conference on Telecommunications (ICT)},
     title={Unified framework for multifactor authentication},
     year = \{2015\},\
     volume={},
     number={},
     pages=\{209-213\},
     abstract={ This paper discusses about the authentication systems in mobile devices. How two
     factor authentication system would be helpful? In this paper they discuss the threats, risks and
     challenges with user authentication and present the techniques to counter these problems with
     several patterns and approaches.},
     doi={10.1109/ICT.2015.7124684},
     ISSN={}
     month={April},}
     @inproceedings{Alaca:2016:DFA:2991079.2991091.
14
      author = {Alaca, Furkan and van Oorschot, P. C.},
      title = {Device Fingerprinting for Augmenting Web Authentication: Classification and Analysis
     of Methods \},
      booktitle = {Proceedings of the 32Nd Annual Conference on Computer Security Applications},
      series = \{ACSAC '16\},\
      year = \{2016\},\
      isbn = \{978-1-4503-4771-6\},\
      location = {Los Angeles, California, USA},
      pages = \{289-301\},
      numpages = \{13\},
      url = \{http://doi.acm.org/10.1145/2991079.2991091\},\
      doi = \{10.1145/2991079.2991091\},\
      acmid = \{2991091\},\
      publisher = \{ACM\},\
      address = {New York, NY, USA},
      keywords = {comparative analysis, comparative criteria, device fingerprinting, multi-
     dimensional authentication, passwords},
      abstract= {This article mentions and compares different types of authentication that can be used
     for web based services and systems. It gives a brief insight about different types of attacks and
     what can be done to overcome that also they have a proposed their own experimental design.
     }
```

```
Week 8
    @article{Wang:1998:CPC:272287.272299,
     author = {Wang, Huaiging and Lee, Matthew K. O. and Wang, Chen},
     title = {Consumer Privacy Concerns About Internet Marketing},
     journal = {Commun. ACM},
     issue\_date = \{March 1998\},\
     volume = \{41\},
     number = \{3\},
     month = mar,
     year = \{1998\},\
     issn = \{0001-0782\},\
     pages = \{63--70\},
     numpages = \{8\},
     url = \{http://doi.acm.org/10.1145/272287.272299\},\
     doi = \{10.1145/272287.272299\},\
     acmid = \{272299\},\
     publisher = \{ACM\},
     address = {New York, NY, USA},
     abstract= { This article talks about the privacy concerns attached with the internet marketing in
     the 90's. Provides an overview why privacy is needed for every individual.
16
     @article{doi:10.3109/09638288.2014.938178,
    author = {Sarah Lewthwaite},
    title = {Web accessibility standards and disability: developing critical perspectives on
    accessibility},
    journal = {Disability and Rehabilitation},
    volume = \{36\},
    number = \{16\},
    pages = \{1375-1383\},
    year = \{2014\},
    publisher = {Taylor & Francis},
    doi = \{10.3109/09638288.2014.938178\},
       note = \{PMID: 25009950\},\
    URL = {https://doi.org/10.3109/09638288.2014.938178},
    eprint = {https://doi.org/10.3109/09638288.2014.938178},
    abstract = { This article speaks about, how and why the Web is not accessible by people who have
    disability. It provides inputs on how can it solved and allow people with disabilities also use the
    web which results in web accessibility standards conveying powerful norms fixing the relationship
    between technology and disability, irrespective of geographical, social, technological or cultural
```

diversity.},

```
Week 9
```

```
@inproceedings{Wortwein:2015:IWI:2818346.2823298,
      author = {W\"{o}rtwein, Torsten and Schauerte, Boris and M\"{u}ller, Karin E. and
     Stiefelhagen, Rainer},
      title = {Interactive Web-based Image Sonification for the Blind},
      booktitle = {Proceedings of the 2015 ACM on International Conference on Multimodal
     Interaction \},
      series = \{ICMI'15\},
      year = \{2015\},\
      isbn = \{978-1-4503-3912-4\},\
      location = {Seattle, Washington, USA},
      pages = \{375-376\},
      numpages = \{2\},
      url = \{http://doi.acm.org/10.1145/2818346.2823298\},\
      doi = \{10.1145/2818346.2823298\},\
      acmid = \{2823298\},\
      publisher = \{ACM\},\
      address = {New York, NY, USA},
      keywords = {assistive technology, blind, image processing, interactive, mobile, sonification,
     web \}.
      abstract = {This research paper talks about how the blind people can view the web pages using
     the method called sonification using Javascript API's. This would enable the blind people to
     view and understand at least the simple things viewable on the web page. They also give an
     insight to the experiments they have performed to achieve this.
18
     @Article{ROUL2016,
     author="ROUL, RAJENDRA KUMAR
     and ASTHANA, SHUBHAM ROHAN
     and SHAH, MIT
     and PARIKH, DHRUVESH",
     title="Detecting spam web pages using content and link-based techniques",
     journal="Sadhana",
     year="2016",
     month="Feb",
     day="01",
     volume="41",
     number="2".
     pages="193--202",
     abstract="This paper is about most important aspect in Web systems. With increasing web
     presence and number of websites in the industry, hackers are creating web pages which are not
     relevant to the users, in the view of spamming them which would result in slowing the internet
     and the entire system. Web spam is a technique through which the irrelevant pages get higher
     rank than relevant pages in the search engine's results. Spam pages are generally insufficient and
     inappropriate results for user. This paper is an effort in that direction, where we propose a
     combined approach of content and link-based techniques to identify the spam pages.",
     issn="0973-7677",
     doi="10.1007/s12046-015-0460-9",
     url="https://doi.org/10.1007/s12046-015-0460-9"
```

```
Week 10
19
        @article{ALOEISI20142282,
        title = "Website design quality and usage behavior: Unified Theory of Acceptance and Use of
        Technology",
        journal = "Journal of Business Research",
        volume = 67,
        number = "11".
        pages = "2282 - 2290",
        year = "2014",
        issn = "0148-2963",
        doi = "https://doi.org/10.1016/j.jbusres.2014.06.016",
        url = "http://www.sciencedirect.com/science/article/pii/S0148296314002136",
        author = "Kholoud Al-Qeisi and Charles Dennis and Eleftherios Alamanos and Chanaka
        Jayawardhena",
        keywords = "Online behavior, Website design quality dimensions, Usage behavior,
        Technology acceptance"
        abstract="This paper talks more about the how the web appearance matters a lot for user
        usage and the same is analyzed and discussed.
        @INPROCEEDINGS {7892359,
20
        author={D. González-Zúñiga and P. O'Shaughnessy and M. Blix},
        booktitle={2017 IEEE Virtual Reality (VR)},
        title={Hypertextual reality: VR on the web},
        vear = \{2017\},\
        volume={ },
        number={},
        pages=\{427-428\},
        abstract={The tutorial focuses on Virtual Reality on the web and how researchers and
        developers can leverage its power to create content. It uses Javascript based API to achieve this
        concept. The WebVR specification is presented, along with examples of how it works in a
        browser. Content creation is addressed by mentioning the available frameworks accompanied
        by a hands-on session in A-Frame. Additionally, the concept of Progressive Web App is
        explained and how it enables web experiences to work offline.},
        keywords={Internet; virtual reality; WebVR; browser; content creation; hypertextual reality;
        progressive Web app; },
        doi={10.1109/VR.2017.7892359},
        ISSN={}
        month={March},}
```

```
Week 11
     @InProceedings{10.1007/978-3-319-19890-3 37,
     author="Zimmer, Bj{\"o}rn
     and Kerren, Andreas",
     editor="Cimiano, Philipp
     and Frasincar, Flavius
     and Houben, Geert-Jan
     and Schwabe, Daniel",
     title="Harnessing WebGL and WebSockets for a Web-Based Collaborative Graph Exploration
     Tool",
     booktitle="Engineering the Web in the Big Data Era",
     year="2015",
     publisher="Springer International Publishing",
     address="Cham",
     pages="583--598",
     abstract="This paper discusses about how the graphics and websockets can be used to build a
     graph exploration page with some wonderful visualizations which can be easily accessible on
     web. In this paper, they analyze the challenges present a client/server-based visualization system
     for the collaborative exploration of graphs using WebGL to render large graphs in a web
     application and provides tools to coordinate the analysis process of multiple users in synchronous
     as well as asynchronous sessions using web sockets.",
     isbn="978-3-319-19890-3"
     }
22
     @article{10.1371/journal.pcbi.1004321,
        author = {King, Zachary A. AND Dräger, Andreas AND Ebrahim, Ali AND Sonnenschein,
     Nikolaus AND Lewis, Nathan E. AND Palsson, Bernhard O.},
        journal = {PLOS Computational Biology},
        publisher = {Public Library of Science},
        title = {Escher: A Web Application for Building, Sharing, and Embedding Data-Rich
     Visualizations of Biological Pathways},
        year = \{2015\},\
```

```
month = {08}, volume = {11}, url = {https://doi.org/10.1371/journal.pcbi.1004321}, pages = {1-13}, abstract = {This article speaks about how the Big data technologies can be used to visualize, analyze the data or the complex datasets and display it to the user using a web application. To facilitate such approaches, they present Escher, a web application that can be used to rapidly build pathway maps. On Escher maps, diverse datasets related to genes, reactions, and metabolites can be quickly contextualized within metabolism and, increasingly, beyond metabolism, and be displayed on the Web Applicaton.}, number = {8}, doi = {10.1371/journal.pcbi.1004321}
```

```
Week 12
      @INPROCEEDINGS {7880163,
      author={L. J. Chi and C. H. Huang and K. T. Chuang},
      booktitle={2016 Conference on Technologies and Applications of Artificial Intelligence
      (TAAI)
      title={Mobile-friendly and streaming web-based data visualization},
      year = \{2016\},\
      volume={},
      number={},
      pages=\{124-129\},
      abstract={ This paper introduces a novel data visualization package, called the ADD framework,
      which is used to support responsive and adaptive data-driven visualization. Since the libraries
      such as D3.js, cannot be easily manipulated as the responsive way like the RWD principle in the
      CSS design. Visualization of abundant information becomes challenging while switching
      between the desktop view or the mobile view. They also discuss about how the ADD framework
      is used for data manipulation and visualization of the data on the mobile browsers. Along with
      this, they also propose a web socket loader prototype for mobile devices },
      keywords={Java; Web sites; data visualisation; graphical user interfaces; interactive
      systems;mobile computing;public domain software;;D3.js;JSON data; },
      doi={10.1109/TAAI.2016.7880163},
      ISSN={}
      month = \{Nov\},\}
      @article{Madsen:2017:MRJ:3152284.3133910.
24
      author = {Madsen, Magnus and Lhot\{a}k, Ond\{r}ej and Tip, Frank},
      title = {A Model for Reasoning About JavaScript Promises},
      journal = {Proc. ACM Program. Lang.},
      issue_date = {October 2017},
      volume = \{1\},
      number = {OOPSLA},
      month = oct,
      year = \{2017\},\
      issn = \{2475-1421\},\
      pages = \{86:1--86:24\},
      articleno = \{86\},\
      numpages = \{24\},
      url = \{http://doi.acm.org/10.1145/3133910\},\
      doi = \{10.1145/3133910\},\
      acmid = \{3133910\},\
      publisher = \{ACM\},\
      address = {New York, NY, USA},
      keywords = {EcmaScript 6, Formal Semantics, JavaScript, Promise Graph, Promises},
      abstract ={ This research paper is about the promises used in asynchronous http requests and
      web servers. This paper presents \hat{\mathbf{l}}_{p_p}, a core calculus that captures the essence of ECMAScript 6
      promises. Based on \hat{I}_{p_0}, we introduce the promise graph, a program representation that can assist
      programmers with debugging of promise-based code. We then report on a case study in which
      we investigate how the promise graph can be helpful for debugging errors related to promises in
      code fragments posted to the StackOverflow website.
```

```
Week 13
```

```
25 @INPROCEEDINGS { 7886970.
    author={J. P. Near and D. Jackson},
    booktitle={2016 IEEE/ACM 38th International Conference on Software Engineering (ICSE)},
    title={Finding Security Bugs in Web Applications Using a Catalog of Access Control Patterns},
    year = \{2016\},\
    volume={ },
    number={},
    pages=\{947-958\},
    abstract={This paper is about a specification-free technique for finding missing security checks in
    web applications using a catalog of access control patterns in which each pattern models a
    common access control use case. They have implemented, SPACE a tool, which checks whether
    every data exposure allowed by an application's code, matches the allowed exposure from a
    security pattern in their catalog.},
    keywords={Internet;authorisation;object-oriented programming;program debugging;data
    exposure; security bugs; security pattern; specification-free technique; Access control;; web
    application security},
    doi={10.1145/2884781.2884836}.
    ISSN={}
    month=\{May\},\}
    @inproceedings{Wijnants:2018:HPI:3178876.3186181.
     author = {Wijnants, Maarten and Marx, Robin and Quax, Peter and Lamotte, Wim},
     title = {HTTP/2 Prioritization and Its Impact on Web Performance},
     booktitle = {Proceedings of the 2018 World Wide Web Conference},
     series = \{WWW'18\},
     year = \{2018\},\
     isbn = \{978-1-4503-5639-8\},\
     location = {Lyon, France},
     pages = \{1755 - 1764\},
     numpages = \{10\},
     url = \{https://doi.org/10.1145/3178876.3186181\},\
     doi = \{10.1145/3178876.3186181\},\
     acmid = \{3186181\},\
     publisher = {International World Wide Web Conferences Steering Committee},
     address = {Republic and Canton of Geneva, Switzerland},
     keywords = {experimental evaluation, http/2, page load time (plt), prioritization, resource
    loading, web performance optimization (wpo)},
    abstract = {This research paper talks about the web application performance and evaluating the
    Page load Time(PLT). They also provide a detailed insight to HTTP/2 specification which is used
    to in various browsers and resulting in the same performance across browsers. They compare and
    evaluate the performance of each of the browsers and conduct experiments and analyze the results
```