UNIVERSITAS
GADJAH MADA
Pengembangan Aplikasi Simulasi Warehouse Management System Agroindustri Dengan Virtual Reality
Aji Wikandaru, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc. ; Dr. Ir. Ahmad Nasikun, S.T., M.Sc.
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Aiyegbusi, O. L. (2020). Key Methodological Considerations For Usability Testing Of Electronic Patient-Reported Outcome (Epro) Systems. *Quality of Life Research*, *29*(2), 325–333. https://doi.org/10.1007/s11136-019-02329-z

Al-Khiami; Mohamad Iyad Jaeger; Martin Soleimani; Sayed Mohamad Kazem; Abdulhadi. (2024). Enhancing concrete structures education: Impact of virtual reality on motivation, performance and usability for undergraduate engineering students. *Journal of Computer Assisted Learning*, *40*(1), 306–325.

Alvarez, J., Rodriguez, R., & Martinez, M. (2020). Work in progress-Use of immersive videos of virtual reality in education. *2020 IEEE World Conference on Engineering Education (EDUNINE)*, 1–4.

Anonim. (2025). *Food Storage Guidelines*. https://foodbanksbc.org/wp-content/uploads/2014/12/Food-Storage-Guidelines.pdf?srsltid=AfmBOooiX4tfQgGrMR526kHEzsSFQJ-8ntMwwDtT3-4K7yzAZKU-NVgx

Austin, J. E. (1981). *Agroindustrial project analysis*. The Johns Hopkins University Press.

Aydin, S., & Aktaş, B. (2020). Developing an integrated VR infrastructure in architectural design education. *Frontiers in Robotics and AI*, *7*, 495468.

Bangor, A., Kortum, P. T., & Miller, J. T. (2008). An empirical evaluation of the System Usability Scale. *International Journal of Human–Computer Interaction*, *24*(6), 574–594.

Barnum, C. M. (2021). *Usability Testing Essentials: Ready, Set …Test!* (2 ed.). Morgan Kaufmann, an imprint of Elsevier.

Biswas, N., Mukherjee, A., & Bhattacharya, S. (2024). “Are you feeling sick?” – A systematic literature review of cybersickness in virtual reality. *ACM Computing Surveys*, *56*(11), 1–38. https://doi.org/10.1145/3670008

Buditjahjanto, I. G. P. A. (2022). Analyzing factors of GUI simulation as learning media toward students’ learning outcomes. *Journal of Technology and Science Education*, *12*(1), 83–95. https://doi.org/10.3926/jotse.1317

Clark, N., Dabkowski, M., Driscoll, P. J., Kennedy, D., Kloo, I., & Shi, H. (2021). Empirical Decision Rules for Improving the Uncertainty Reporting of Small Sample System Usability Scale Scores. *International Journal of Human–Computer Interaction*, *37*(13), 1191–1206. https://doi.org/10.1080/10447318.2020.1870831

Costa, C., Antonucci, F., Pallottino, F., Aguzzi, J., Sarriá, D., & Menesatti, P. (2013). A Review on Agri-food Supply Chain Traceability by Means of RFID Technology. *Food and Bioprocess Technology*, *6*(2), 353–366. https://doi.org/10.1007/s11947-012-0958-7

Daalen, V. C. E., Schaffernicht, M., & Mayer, I. (2014, Juli). System dynamics and serious games. *International Conference of the System Dynamics Society*.

Das, K. R., & Imon, A. H. M. R. (2016). A Brief Review of Tests For Normality. *American Journal of Theoretical and Applied Statistics*, *5*(1), 5–12. https://doi.org/10.11648/j.ajtas.20160501.12

UNIVERSITAS
GADJAH MADA
Pengembangan Aplikasi Simulasi Warehouse Management System Agroindustri Dengan Virtual Reality
Aji Wikandaru, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc. ; Dr. Ir. Ahmad Nasikun, S.T., M.Sc.
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

David, L., & Weinstein, N. (2024). Using technology to make learning fun: technology use is best made fun and challenging to optimize intrinsic motivation and engagement. *European Journal of Psychology of Education*, *39*(2), 1441–1463.

Deshmukh, A. M., & Chalmeta, R. (2024). Validation of system usability scale as a usability metric to evaluate voice user interfaces. *PeerJ Computer Science*, *10*, e1918. https://doi.org/10.7717/peerj-cs.1918

Diaz-Oreiro, I., López, G., Quesada, L., & Guerrero, L. A. (2021). UX evaluation with standardized questionnaires in ubiquitous computing and ambient intelligence: a systematic literature review. *Advances in Human-Computer Interaction*, *2021*(1), 5518722.

Doerner, R., Broll, W., Grimm, P., & Jung, B. (2022). *Virtual and Augmented Reality (VR/AR): Foundations and Methods of Extended Realities (XR)*. Springer.

El Mawas, N., Tal, I., Moldovan, A.-N., Bogusevschi, D., Andrews, J., Muntean, G.-M., & Muntean, C. H. (2020). Investigating the impact of an adventure-based 3D solar system game on primary school learning process. *Knowledge Management & E-Learning*, *12*(2), 165–190.

Fitria, T. N. (2023). Augmented Reality (AR) and Virtual Reality (VR) Technology in Education: Media of Teaching and Learning: A Review. *International Journal of Computer and Information System (IJCIS)*, *04*(01).

Fussell, S. G., & Hight, M. P. (2021). Usability testing of a VR flight training program. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, *65*(1), 1124–1128.

Galloway, A. (2005). *Non-probability sampling*. Elsevier. https://doi.org/https://doi.org/10.1016/B0-12-369398-5/00382-0

Gedam, M. N., & Meshram, B. B. (2023). Proposed Secure Activity Diagram for Software Development. Dalam *IJACSA) International Journal of Advanced Computer Science and Applications* (Vol. 14, Nomor 6). www.ijacsa.thesai.org

Gergely, O., Mazalová, R., Štýbnar, M., Hlavinka, A., Goodfellow, N., Scott, M., Fleming, G., Jochmannová, L., & Stanke, L. (2024). Patients' UX Impact on Medication Adherence in Czech Pilot Study for Chronically Ill. *Behavioral Sciences*, *14*(6), 489.

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, *10*(2), 486–489.

Gurung, G., Shah, R., & Jaiswal, D. P. (2020). Software Development Life Cycle Models-A Comparative Study. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology*, *6*(4), 30–37. https://doi.org/10.32628/CSEIT206410

Gutierez, M. A., Vexo, F., & Thalmann, D. (2008). *Stepping into Virtual Reality*. Springer-Verlag London Limited.

Hackathorn, J., Solomon, E. D., Blankmeyer, K. L., Tennial, R. E., & Garczynski, A. M. (2011). Learning By Doing: An Empirical Study Of Active Teaching Techniques. *The Journal of Effective Teaching*, *11*(2), 40–54.

Hadi, D. K., Santoso, P. B., & Sucipto. (2019). Traceability implementation based on RFID at agro-industry: A review. *IOP Conference Series: Earth and Environmental Science*, *230*(1), 12070. https://doi.org/10.1088/1755-1315/230/1/012070

UNIVERSITAS
GADJAH MADA
Pengembangan Aplikasi Simulasi Warehouse Management System Agroindustri Dengan Virtual Reality
Aji Wikandaru, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc. ; Dr. Ir. Ahmad Nasikun, S.T., M.Sc.
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Hassenzahl, M., Diefenbach, S., & Göritz, A. (2010). Needs, Affect, and Interactive Products – Facets of User Experience. *Journal of Interacting with Computers*, *22*(5), 353–362.

He, D. (2022). Teaching Practices Of A Warehousing Management Curriculum Based On Virtual Reality Simulation Technology. *International Journal of Emerging Technologies in Learning (iJET)*, *17*(09). https://doi.org/10.3991/ijet.v17i09.30939

Heizer, J. R. B. M. C. (2017). *Operations Management Sustainability and Supply Chain Management 12th Edition*.

Helle, N., Vikman, M. D., Dahl-Michelsen, T., & Lie, S. S. (2023). Health Care and Social Work Students'Experiences With a Virtual Reality Simulation Learning Activity: Qualitative Study. *JMIR Medical Education*, *9*.

Henstrom, J., De Amicis, R., Sanchez, C. A., & Turkan, Y. (2024). Immersive engineering instruction: Using Virtual Reality to enhance students' experience in the classroom. *Computers & Graphics*, *121*, 103944.

Hernández Campos, M., Thomaschewski, J., & C. Law, Y. (2023). Results of a Study to Improve the Spanish Version of the User Experience Questionnaire (UEQ). *International Journal of Interactive Multimedia and Artificial Intelligence*, *8*(4), 202–207. https://doi.org/10.9781/ijimai.2022.11.003

Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, *31*(2), 180–191. https://doi.org/10.1002/nur.20247

Hidayatno, A., Zulkarnain, Hasibuan, R. G., Wardana Nimpuno, G. C., & Destyanto, A. R. (2019). Designing a serious simulation game as a learning media of sustainable supply chain management for biofuel production. *Journal Energy Procedia*, *156*, 43–47.

Hinderks, A., Schrepp, M., Domínguez Mayo, F. J., Escalona, M. J., & Thomaschewski, J. (2019). Developing A UX KPI Based On The User Experience Questionnaire. *Computer Standards & Interfaces*, *65*, 38–44. https://doi.org/10.1016/j.csi.2019.01.007

Huerta-Torruco, V. A., Hernández-Uribe, Ó., Cárdenas-Robledo, L. A., & Rodr\'\iguez-Olivares, N. A. (2022). Effectiveness of virtual reality in discrete event simulation models for manufacturing systems. *Computers & Industrial Engineering*, *168*, 108079.

Ingrassia, T., Lombardo, E., Nigrelli, V., & Sabatino, G. (2008). Kansei Engineering And Virtual Reality In Conceptual Design. *Journal Quality Management and Organizational Development Attaining Sustainability*.

Jasper, J. (2019). Virtual Reality-Based Product Representations in Conjoint Analysis. *International Journal of Innovation and Economics Development*, *4*(6), 51–67.

Jerga F. (2021). *What Is The Unity Game Engine- All You Need To Know*. medium.com. https://medium.com/eincode/what-is-theunity-game-engineall-you-need-to-know-d4ce77a1b7d2

Jordan, P. W. (2000). *Designing Pleasurable Product: An introduction to the new human factors*. Taylor & Francis.

Kalinov, I., Trinitatova, D., & Tsetserukou, D. (2021). WareVR: Virtual Reality Interface for Supervision of Autonomous Robotic System aimed at Warehouse Stocktaking. *IEEE International Conference on Systems, Man, and Cybernetics (SMC)*.

UNIVERSITAS
GADJAH MADA
Pengembangan Aplikasi Simulasi Warehouse Management System Agroindustri Dengan Virtual Reality
Aji Wikandaru, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc. ; Dr. Ir. Ahmad Nasikun, S.T., M.Sc.
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Kalkofen, D., Mori, S., Ladinig, T., Daling, L., Abdelrazeq, A., Ebner, M., Ortega, M., Feiel, S., Gabl, S., Shepel, T., & others. (2020). Tools for teaching mining students in virtual reality based on 360 video experiences. *2020 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*, 455–459.

Kaminska, D., Zwolinski, G., & Laska-Leśniewicz, A. (2022). Usability Testing of Virtual Reality Applications—The Pilot Study. *Sensors*, *22*(1342). https://doi.org/10.3390/s22041342

Kang, H., Yang, J., Ko, B.-S., Kim, B.-S., Song, O.-Y., & Choi, S.-M. (2023). Integrated augmented and virtual reality technologies for realistic fire drill training. *IEEE computer graphics and applications*, *44*(2), 89–99.

Koch, R. (2011). *The 80/20 Principle: The Secret to Achieving More with Less*. Nicholas Brealey Publishing.

Kushendriawan, M. A., Az-Zahra, H. M., & Rokhmawati, R. I. (2018). Evaluasi website forum United Indonesia dengan metode Kansei Engineering dan Extended Goal Question Metric untuk meningkatkan user experience. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, *2*(11), 5022–5029.

Latif, J. J. K., Triputra, A. A., Kesuma, M. A., & Maulana, F. I. (2023). Design and Development a Virtual Planetarium Learning Media Using Augmented Reality. *Procedia Computer Science*, *227*, 726–733. https://doi.org/10.1016/j.procs.2023.10.577

Laugwitz, B., Held, T., & Schrepp, M. (2008). Construction And Evaluation Of A User Experience Questionnaire. Dalam A. Holzinger (Ed.), *USAB 2008, Lecture Notes in Computer Science* (Vol. 5298, hlm. 63–76). Springer-Verlag. https://doi.org/10.1007/978-3-540-89350-9_6

Liu, X., & Yang, S. (2022). Study On Product Form Design Via Kansei Engineering And Virtual Reality. *Journal of Engineering Design*.

Mahendra, F. M. (2024). *Pengembangan Permainan Edukasi Berbasis Virtual Reality Untuk Asesmen Pelafalan Dasar Bahasa Korea*. Program Studi Teknologi Informasi, Departemen Teknik Elektro dan Teknologi Informasi, Fakultas Teknik, Universitas Gadjah Mada.

Mishra, A., & Alzoubi, Y. I. (2023). Structured software development versus agile software development: a comparative analysis. *International Journal of System Assurance Engineering and Management*, *14*(4), 1504–1522.

Montgomery, D. C., & Runger, G. C. (2011). *Applied statistics and probability for engineers* (5 ed.). John Wiley & Sons.

Munassar, N. M. A., & Govardhan, A. (2010). A Comparison Between Five Models of Software Engineering. *IJCSI International Journal of Computer Science Issues*, *7*(5), 94.

Nery, M. P., Neto, S. J. dos S., Alves, R. S., Santana, J. V. dos S., Griza, S., & Martins, C. O. D. (2024). Development Of Educational Software For Stainless Steel Selection And Evaluating Usability Using The System Usability Scale (SUS). *International Journal of Mechanical Engineering Education*. https://doi.org/10.1177/03064190241266978

Nguyen, V. (2023). *Usability Testing In Virtual Reality And Traditional Physical Environments: A Comparative Study*. School of Industrial Design, College of Design, Georgia Institute of Technology.

UNIVERSITAS
GADJAH MADA
Pengembangan Aplikasi Simulasi Warehouse Management System Agroindustri Dengan Virtual Reality
Aji Wikandaru, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc. ; Dr. Ir. Ahmad Nasikun, S.T., M.Sc.
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Nielsen, J. (1994). *Usability Engineering*. AP Professional.

Ozcelik, D., Quevedo-Fernandez, J., Thalen, J., & Terken, J. (2011). Engaging Users In The Early Phases Of The Design Process: Attitudes, Concerns And Challenges From Industrial Practice. *DPPI '11: Proceedings of the 2011 Conference on Designing Pleasurable Products and Interfaces*, 1–8.

Pasin, F., & Giroux, H. (2011). The Impact Of A Simulation Game On Operations Management Education. *Computers & Education*, *57*(1), 1240–1254.

Pirker, J., & Dengel, A. (2021). The potential of 360° virtual reality videos and real VR for education—A literature review. *IEEE Computer Graphics and Applications*, *41*(3), 86–93.

Pressman, R. S. (2010). *Software engineering: A practitioner's approach* (7 ed.). McGraw-Hill.

Qureshi, M. I., Khan, N., Raza, H., Imran, A., & Ismail, F. (2021). Digital Technologies in Education 4.0. Does it Enhance the Effectiveness of Learning? *International Journal of Interactive Mobile Technologies*, *15*(4), 31–47. https://doi.org/10.3991/IJIM.V15I04.20291

Rosenberg, B. D., & Navarro, M. A. (2018). *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. Sage Publications.

Royce, W. W. (1970). Managing the Development of Large Software Systems. *Proceedings, IEEE WESCON*.

Sauro, J., & Lewis, J. R. (2012). *Quantifying the user experience: Practical statistics for user research*. Morgan Kaufmann. https://doi.org/10.1016/C2013-0-19085-7

Schrepp, M. (2023). *User Experience Questionnaire Handbook: All You Need To Know To Apply The UEQ Successfully In Your Projects (Version 11)*.

Shylesh, S. (2017). A study of software development life cycle process models. *National Conference on Reinventing Opportunities in Management, IT, and Social Sciences*, 534–541.

Spillner, A., & Linz, T. (2021). *Software testing foundations: A study guide for the Certified Tester exam (CTFL) based on the ISTQB®syllabus* (5 ed.). Rocky Nook.

Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Sukirman, Ibharim, L. F. M., Said, C. S., & Murtiyasa, B. (2024). Development and Usability Testing of a Virtual Reality Game for Learning Computational Thinking. *International Journal of Serious Games*, *11*(3), 1–25.

Takano, E., Maruyama, H., Takahashi, T., Mori, K., Nishiyori, K., Morita, Y., Fukuda, T., Kondo, I., & Ishibashi, Y. (2023). User experience of older people while using digital health technologies: A systematic review. *Applied Sciences*, *13*(23), 12815.

Tseng, W.-J., Kontrazis, P. D., Lecolinet, E., Huron, S., & Gugenheimer, J. (2024). Understanding Interaction and Breakouts of Safety Boundaries in Virtual Reality Through Mixed-Method Studies. *2024 IEEE Conference Virtual Reality and 3D User Interfaces (VR)*, 482–492. https://doi.org/10.1109/VR58804.2024.00069

Ushada, M., Khuriyati, N., Agustriana, S., & Okayama, T. (2020). Evaluation Of Kansei Engineering-Based Sensor For Agro-Industry (KESAN). *Agricultural Engineering International: CIGR Journal*, *22*(1), 133.

Van Griethuijsen, R. A. L. F., Van Eijck, M. W., Haste, H., Den Brok, P. J., Skinner, N. C., Mansour, N., Savran Gencer, A., & BouJaoude, S. (2015). Global patterns in

UNIVERSITAS
GADJAH MADA
Pengembangan Aplikasi Simulasi Warehouse Management System Agroindustri Dengan Virtual Reality
Aji Wikandaru, Prof. Dr. Mirwan Ushada, S.T.P., M.App.Life.Sc. ; Dr. Ir. Ahmad Nasikun, S.T., M.Sc.
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

students' views of science and interest in science. *Research in science education*, *45*(4), 581–603.

Walls, R., Nageswaran, P., Cowell, A., Sehgal, T., White, T., McVeigh, J., Staykov, S., Basett, P., Mitelpunkt, D., & Sam, A. H. (2024). Virtual reality as an engaging and enjoyable method for delivering emergency clinical simulation training: a prospective, interventional study of medical undergraduates. *BMC Medicine*, *22*(1), 222. https://doi.org/10.1186/s12916-024-03433-9

Webster, R. (2017). System Usability Scale (SUS): Oculus Rift DK2 and Samsung Gear VR. *American Society for Engineering Education*.

Whitley, E., & Ball, J. (2002). Statistics review 6: Nonparametric methods. *Critical Care*, *6*(6), 509–513.

Winter, C., Kern, F., Gall, D., Latoschik, M. E., Pauli, P., & Käthner, I. (2021). Immersive virtual reality during gait rehabilitation increases walking speed and motivation: a usability evaluation with healthy participants and patients with multiple sclerosis and stroke. *Journal of neuroengineering and rehabilitation*, *18*(1), 68.

Xu, C., Siegrist, M., & Hartmann, C. (2021). The application of virtual reality in food consumer behavior research: A systematic review. Dalam *Trends in Food Science and Technology* (Vol. 116, hlm. 533–544). Elsevier Ltd. https://doi.org/10.1016/j.tifs.2021.07.015